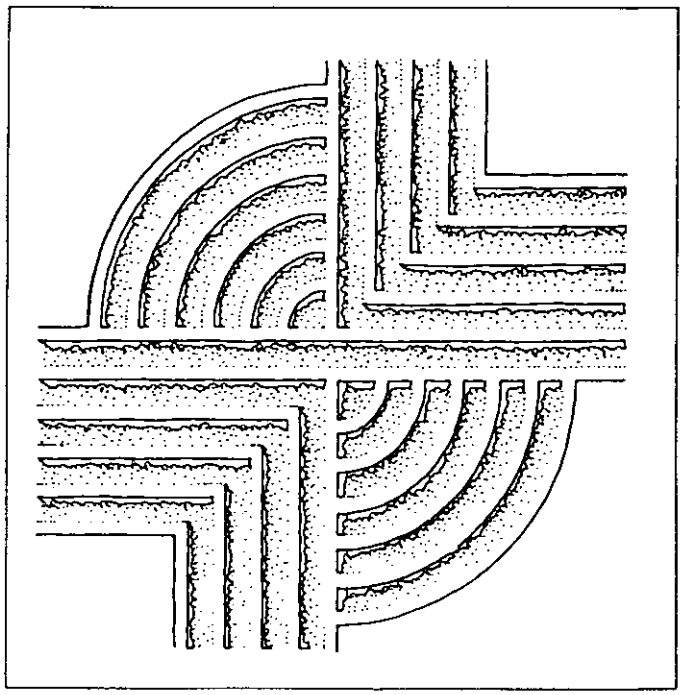
ARCHAEOLOGICAL SURVEY OF THE PROPOSED WASTEWATER TREATMENT IMPROVEMENTS FOR THE CITY OF DILLON, DILLON COUNTY, SC



CHICORA RESEARCH CONTRIBUTION 125

ARCHAEOLOGICAL SURVEY OF THE PROPOSED WASTEWATER TREATMENT IMPROVEMENTS FOR THE CITY OF DILLON, DILLON COUNTY, SC

Prepared By:
Natalie Adams
Michael Trinkley

Prepared For:
Mr. Lonnie Dye, PE
Hussey, Gay, Bell & DeYoung
Columbia, South Carolina

CHICORA RESEARCH CONTRIBUTION 125

Chicora Foundation, Inc.
PO Box 8664 ▫ 861 Arbutus Drive
Columbia, South Carolina 29202
803/787-6910

ABSTRACT

This study represents an intensive archaeological survey of the 800 acre tract proposed for the construction of a wastewater effluent land application facility for the City of Dillon in Dillon County, South Carolina. Situated on the sandy bluffs overlooking the Little Pee Dee River swamp, the project is located in an area of relatively limited archaeological and historical investigation. While the primary goal of this research was to identify and assess the archaeological sites present in the proposed project area, secondary goals included the examination of archaeological resources present in this part of South Carolina using an explorative research design.

As a result of the investigations 21 archaeological sites were identified through the use of systematic shovel testing in wooded tracts and pedestrian survey in agricultural fields. In addition, historic period maps provide further information on historic settlement patterns which guided archaeological investigations.

Of the identified resources, two archaeological sites have been recommended as eligible for inclusion on the National Register of Historic Places. Site 38DN116 represents a large Native American occupation with up to two feet of stratigraphy. The primary site component is a Middle Woodland Yadkin camp dating from perhaps 500 B.C. This component exhibits a well preserved artifact assemblage and the site is recommended eligible for the National Register based on its ability to address significant typological, chronological, and settlement-related questions. The second site recommended eligible for inclusion on the National Register, 38DN121, is a late nineteenth and early twentieth century tenant settlement complex. This site is able to address issues relating to tenancy in Dillon County, especially during the postbellum rise of cotton.

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ACKNOWLEDGEMENTS

This work was funded by the City of Dillon, with the project being administered by the consulting engineering firm of Hussey, Gay, Bell & DeYoung, Inc. We appreciate the assistance and cooperation of all those involved, especially Mr. Lonnie Dye, PE. In addition, we appreciate the support and assistance of the local community, especially Mr. Earl Gleason.

A variety of others also assisted in our work, including the staffs of the Thomas Cooper Map Repository and the South Caroliniana Library, who assisted us in our historic background investigations. Mr. Keith Derting of the South Carolina Institute of Archaeology and Anthropology assisted in the recordation of the sites and Ms. Sharon Peckrul was responsible for overseeing the final curation of the artifacts from this project. In addition, the field crew responsible for the survey, Mr. Ryan Boera, Ms. Kris Fowler, and Mr. Steve Wenzell are thanked for their professionalism and dedication. While we assume responsibility for this study, we appreciate the review comments offered by Mr. Lee Tippett, Archaeologist with the South Carolina State Historic Preservation Office.

INTRODUCTION

Background

This investigation of the proposed 800 acre Dillon Wastewater Effluent Land Application Facility was conducted by Ms. Natalie Adams of Chicora Foundation, Inc. for the Town of Dillon, South Carolina. The tract is situated in the eastern portion of Dillon County, in the northeastern corner of South Carolina bordering North Carolina (Figure 1). More specifically, the property lies north of the Little Pee Dee River and east of S-45 which connects Floydale and Pittman Corners. The proposed tract is bordered to the northeast by Bell Swamp Branch, to the east and southeast by property lines, to the southwest by the Little Pee Dee swamps, and to the west and northwest by property lines.

Within the survey tract are a number of agricultural fields, fields planted in pine, and wooded areas, as well as two large Carolina Bays known locally as Ben Pond and Cypress Pond. There are also several out parcels, which not being purchased by the City are not included in this survey. A dirt road runs east-west through the survey tract, connecting to S-22 which bisects the eastern edge of the property (Figure 2). A series of smaller dirt roads provide access to some areas of the tract, although much of the survey required hiking into more remote areas. Only the high ground was incorporated into this study, excluding resources which might be within the two Carolina Bays, as well as those which may be adjacent to the property in either the Little Pee Dee or Bell Swamp Branch swamps.

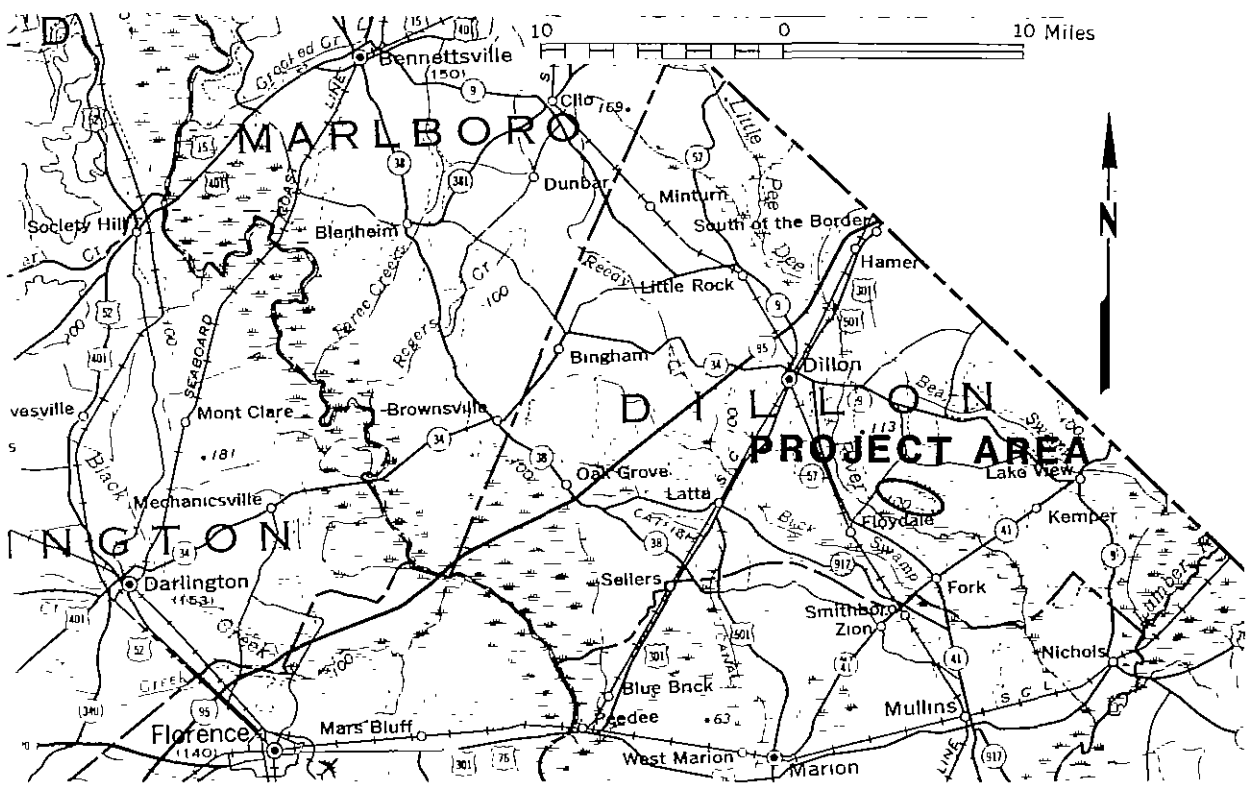


Figure 1. Map of the Dillon County area.

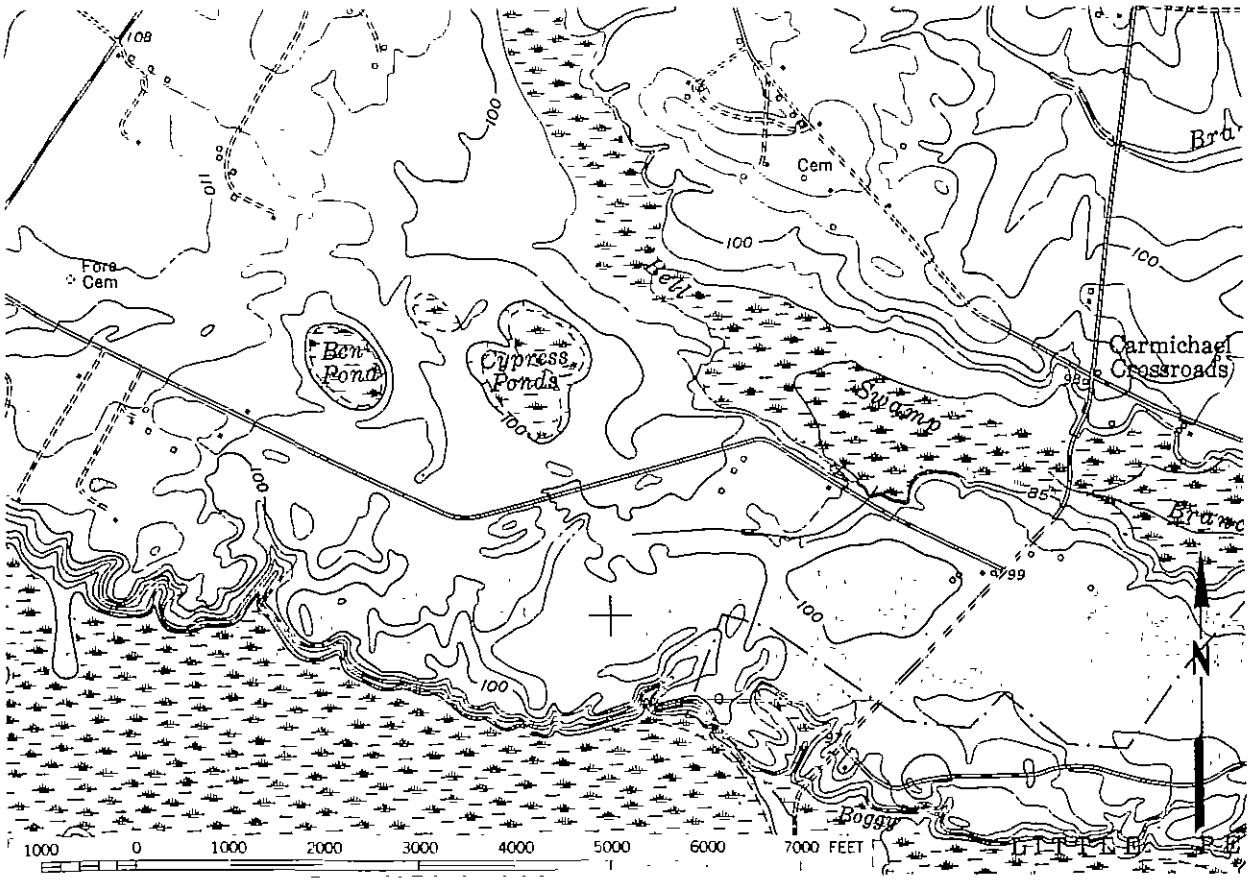


Figure 2. Project area shown on the 1959 Fork USGS quadrangle map.

The City of Dillon is proposing to construct a major wastewater effluent land application facility on the property, including large sewer lines, holding ponds, spray fields, and support facilities. Related to this work will be extensive ground disturbing activities, including clearing, grubbing, filling, and grading, as well as excavation for underground pipes and utilities. It is the ground disturbing nature of the project which has required this investigation.

The proposed project was twice reviewed by the South Carolina State Historic Preservation Office with the conclusion that the project would not affect any known historic or archaeological resources and with no recommendation for further investigation. When local individuals reported the presence of a possible "Indian burial mound," the State Historic Preservation Office (SHPO) recommended that additional investigations be conducted, including an intensive archaeological survey (letter from Ian Hill, SCDAH to SCDHEC dated October 22, 1993).

Goals

The primary goals of this study were, first, to identify the archaeological resources of the study area, and, second, to assess the ability of these sites to contribute significant archaeological, historical, or anthropological data. The second aspect essentially involves the site's eligibility for inclusion in the National Register of Historic Places, although Chicora Foundation only provides an opinion of National Register eligibility and the final determination is made by the lead compliance agency in consultation with the State Historic Preservation Officer at the South Carolina Department of Archives and History. The secondary goals were, first, to examine the relationship between site location, soil type, and topography, expanding the previous research of Taylor (1984) and Trinkley

and Adams (1992) for the Pee Dee region; and second, to explore historic settlement pattern change through time. These secondary goals are of considerable importance since little work has been done on both prehistoric and historic sites in the Upper Coastal Plain of South Carolina.

To identify sites within the development tract, a strategy of intensive shovel testing of wooded areas was coupled with pedestrian survey of plowed fields. Most of this wooded area occurred along the bluff edge near the Little Pee Dee River swamp as well as several upland parcels. It was along the Little Pee Dee River swamp and Bell Swamp branch that previous findings by Taylor (1984) and (Trinkley and Adams 1992) would be tested for prehistoric site location. At the Pee Dee Electrical Generating Station tract, prehistoric sites along the bluff edge were no less than 400 feet across. Combined with the field survey was a preliminary examination of archival and secondary records pertaining to the tract. This archival study revealed several early twentieth century maps which were used to assist in locating most of the tenant sites. In addition, Mills' Atlas of 1826 was used to assist in identifying late eighteenth and early nineteenth century sites.

Once identified, sites were evaluated for their potential eligibility for inclusion on the National Register of Historic Places. It is generally accepted that "the significance of an archaeological site is based on the potential of the site to contribute to the scientific or humanistic understanding of the past" (Bense et al. 1986:60). Bulter suggests that the the only valid measurement of significance must be based on what he calls the "theoretical and substantive knowledge of the discipline" at any particular moment in time (Butler 1987:821). While the use of this approach over that developed by Glassow (1977) has been suggested, Butler himself acknowledges, "we cannot forsee future research questions, and we may not possess the theory to interpret and understand all that is present" (Butler 1987:822). At this point in time it seems essential to recognize the importance of asking the right questions at the right sites, not limiting the number of sites at which questions are asked, or what questions are posed. Clearly, asking "right questions" at the "right sites" can be difficult and requires an understanding of the "theoretical and substantive knowledge of the discipline" (for a more detailed discussion of these questions, particularly relating to Woodland Period sites, see Trinkley 1990:30-31).

Glassow's (1977) approach to evaluating site eligibility is through the use of five properties: site integrity, site clarity, artifactual variety, artifactual quantity, and site environmental context. These qualities stress properties of the archaeological record, rather than a site's ability or potential to assist in providing data to limited, and possibly transient, research design.

Site significance in this survey was evaluated using the recently published process of Townsend et al. (1993). This evaluative process involved five steps, forming a clearly defined, explicit rationale for either the site's eligibility or lack of eligibility. Briefly, these steps are:

- identification of the site's data sets or categories or archaeological information such as ceramics, lithics, subsistence remains, architectural remains, or subsurface features;

- identification of the historic context applicable to the site, providing a framework for the evaluative process;

- identification of the important research questions the sight *might* be able to address, given the data sets and the context;

- evaluation of the site's archaeological integrity to ensure that the data sets were sufficiently well preserved to address the research questions; and

- identification of "important" research questions among all of those which might be asked

and answered at the site.

This approach, of course, has been developed for use documenting eligibility of sites being actually nominated to the National Register of Historic Places where the evaluative process must stand alone, with relatively little reference to other documentation.

A secondary goal was to compare the results of the survey to previous work in the Pee Dee River basin. Very few archaeological investigations have been conducted in the Inner Coastal Plain with two investigations (Taylor 1984; Trinkley and Adams 1992) comparable. Results of this investigation can be used to refine ideas obtained from previous surveys (Taylor 1984) about site location and settlement pattern change in the Pee Dee River basin.

Curation

Archaeological site forms have been filed with the South Carolina Institute of Archaeology and Anthropology. The field notes, photographic materials, and artifacts resulting from these investigations have been curated at the South Carolina Institute of Archaeology and Anthropology using their proveniencing system. All original records and duplicate copies will be provided to the Institute in archival condition and will be maintained by that institution in perpetuity.

NATURAL SETTING

Physiography

Dillon County is situated in the Inner Coastal Plain of South Carolina and is bounded on the southwest by the Great Pee Dee River, on the south by Marion and Florence counties, on the southeast by the Lumber River, on the northeast by North Carolina, and on the west by Marlboro County. The land primarily consists of gently rolling hills with elevations ranging from about 42 feet above mean sea level in parts of the river floodplains to a high of about 170 feet above sea level in the northern part of the county (Dudley 1978:1).

The Great Pee Dee River and the Lumber River flow past the county on the southwest and southeast. Their main tributaries include Poccosin Swamp, Gum Swamp, and Beaverdam Creek. The Little Pee Dee River flows through the center of the county. In the project area, the Little Pee Dee River swamp is found on the southeastern edge of the property and Bell Swamp branch is located on the northeastern edge of the property. There are two Carolina bays within the study area (Ben Pond and Cypress Pond). Both are located in the northwestern portion of the study area.

The study area is situated in the souther portion of Dillon County. The proposed tract is bordered to the northeast by Bell Swamp Branch, to the east and southeast by property lines, to the southwest by the Little Pee Dee swamps, and to the west and northwest by property lines. The topography tends to be flat with a range of elevation between 85 and 110 feet above sea level. The lower areas of the tract are located adjacent to Bell Swamp branch. The property rises gently in the center where the highest elevations are found. This is also the area of the small rise locally thought to be an Indian mound. This mound was actually a small hillock and was not cultural in origin.

Geology and Soils

The geology is characteristic of the Coastal Plain. The parent materials of the soils are marine or fluvial deposits which consist of varying amounts of sands, silts, and clays. There are three terrace formations in the county formed during the Pleistocene period. The Sunderland terrace is about 100 to 170 feet above sea level and makes up most of Dillon County. The Wicomico terrace is about 70 to 100 feet about sea level and makes up areas along the Little Pee Dee River swamp and its tributaries. The Penholoway terrace is about 42 to 70 feet above sea level. It makes up stream terrace soils along the Great Pee Dee, the Little Pee Dee, and the Lumber Rivers (Dudley 1978:56-57).

The project area contains 10 soil series including Fuquay, Kenansville, Lakeland, Leon, Lychburg, Osier, Paxville, Pocalla, Rains, and Rutlege soils. Of these, Paxville, Pocalla, and Rutlege are classified as very poorly drained, Leon, Osier, and Rains are poorly drained, Lynchburg is somewhat poorly drained, Fuquay and Kenansville soils are well drained, and Lakeland soils are excessively drained. Approximately 75% of the study area contains well drained soils.

Mills comments that the swampland soils are composed of the "richest soil". He notes that "[w]hile the swamp lands reclaimed and secured from freshets, will bring 50 dollars an acre; and the oak and hickory lands 15 dollars an acre; the pine lands will scarcely sell for 1 dollar per acre" (Mills 1972 [1826]:623). He also observed that "[o]ff the water courses the situations are healthy", but "[a]s the swamps are the principal sources of disease in this country, it is much to be regretted that

measures are not taken to drain, or reclaim them, which would not only secure the blessing of health to the people, but afford an immense quantity of rich soil for cultivation to the district" (Mills 1972 [1826]:625). The products cultivated during that time were "cotton, corn, wheat, pease, and potatoes" (Mills 1826:623).

Climate

The general climate of the Dillon County area is characterized by mild humid conditions. This climate is influenced by the warm Gulf Stream, as well as by the Appalachian mountains which block the coldest air masses. Other factors include latitude, elevation, distance from the ocean, and location with respect to the average tracts of migratory cyclones. Day to day weather is controlled primarily by the movement of pressure systems across the nation. However, during the summer months there are few complete exchanges of air masses because tropical maritime air persists for extended periods (Dudley 1978:57).

The average annual precipitation in the Dillon area is 46.12 inches and is unevenly distributed throughout the year, with 29.35 inches occurring from April through October which is the primary growing season (Dudley 1978:70).

The climate, according to Mills (1972 [1826]:625), "taking the whole year round, is pleasant". The annual average temperature in Dillon is 61.2°F, and the average monthly temperature ranges from 42.6°F in January to 79.0°F in July. Frozen precipitation occurs only one to three times a year during the winter season. The abundant supply of warm, moist and relatively unstable air produces frequent scattered showers and thunderstorms in the summer. Severe weather usually means violent thunderstorms, tornadoes, and hurricanes. The tropical storm season is in late summer and early fall, although storms may occur as early as May or as late as October (NOAA, 1977). Heavy rains and high winds occur with tropical storms about once every six years. Storms of hurricane intensity are much more infrequent. Droughts have occurred twice in modern times; in 1925 and 1954. Less severe dry periods have occurred more often, normally in late spring or in autumn (Dudley 1978:70).

Floristics

There are two major categories of plant communities exist in the Coastal Plain area where there is nearly level topography. The first category consists of upland vegetation. Supported here are a mixture of coniferous and deciduous forests dominated by pines and broadleaf taxa such as upland oaks, sweetgum, hickories, and various understory species.

Lowland forests are located on the floodplains of the Pee Dee, Little Pee Dee, and Lynches rivers. This floodplain is 30 to 40 feet lower in elevation and is clearly defined by a scarp, such as found on the southern boundary of the survey tract. These floodplain soils are forested with bald cypress, gum, sycamore, water hickory, lowland oaks, soft maples, willows, and other herbaceous species.

In the early nineteenth century Mills observed that:

> the long leafed pine is most abundant of the forest trees; next the cypress, various kinds of oak, the hickory, tupilo &c. Of fruit trees the peach, apple, pear, plum,. &c. are common (Mills 1972 [1826]:624).

Mills also observed that the major use of these forest resources was construction, also noting that "good clay is found in various places, suitable to make brick" (Mills 1972 [1826]:625). Only lime, largely made of burnt shells, needed to be imported into the area (primarily from neighboring

Georgetown). Mills encouraged the residents to make better use of their local "shell limestone" for lime, a suggestion which appears to have made little impact in the local economy (Mills 1972 [1826]:628).

Today, about a third of the Dillon County's uplands have been cleared for cultivation. On the survey tract, approximately 30 percent of the land was in fallow fields or active cultivation. Most of the remainder of the area consisted primarily of coniferous and deciduous trees including pines, oaks, sweetgums, and hickories. An additional 20 percent of the study area had been logged and was cleared of all but weedy vegetation.

RESEARCH STRATEGY AND METHODS

Introduction

As previously indicated, the primary goals of this survey are to identify, record, and assess the significance of archaeological sites within the approximately 800 acre tract. Secondary goals of the survey include an examination of the soils, drainage, and topographic setting as they affect the location of prehistoric sites, and to examine and refine the historic settlement systems as previously observed in other areas along the Pee Dee River system (see Taylor 1984; Trinkley and Adams 1992). No major analytical hypotheses were created prior to the field work and data analysis, although certain expectations regarding the secondary goals will be outlined in these discussions. The research design proposed for this study is, as discussed by Goodyear et al. (1979:2), fundamentally explorative and explicative.

Archival Research

These investigations incorporated a review of the site files at the South Carolina Institute of Archaeology and Anthropology. No previously recorded archaeological sites were within the survey boundaries. In addition, the South Carolina Department of Archives and History was contacted, requesting information on the identification of any National Register buildings, districts, structures, sites, or objects, or the presence of any structure surveys, in the vicinity of the 800 acre survey tract. No National Register property or structure surveys were found for the study area (Dr. Tracy Powers, personal communication 1993).

Archival and historical research was conducted at the Thomas Cooper Library, the South Carolina Department of Archives and History, and the South Caroliniana Library. The published indices for the South Carolina Historical Society and the Southern History Collection were also examined for references pertinent to the study area. Throughout this historical research an emphasis was placed on the primary, rather than secondary, sources as the appropriate level of initial study. While the historical research is not exhaustive, it does provide a clear background and is a sufficient base for future work in the project area.

Field Survey

The typical methodology for a compliance survey of a tract such as the 800 acre Dillon County wastewater treatment tract is to establish a systematic intensive survey methodology which examines the entire acreage for archaeological and historical resources. Such an approach, however, does not necessarily require that all areas be examined with equal intensity.

Chicora Foundation proposed to meet the previously outlined goals in a cost and time-effective manner by using a stratified survey approach. This approach uses criteria for site location developed by Chicora Foundation as a result of 20 years of research (including the results of the Santee Cooper Pee Dee survey and Gibson Plantation tract survey discussed in greater detail below and in the section detailing "Previous Research") and divides the survey tract into different "strata" or areas based on the criteria.

The intensity of the survey effort is then determined by the likelihood of identifying

archaeological sites within a particular strata or area. The areas most likely to reveal archaeological sites are those most intensively examined. Those with the least potential for prehistoric or historic occupation are the least intensively examined.

Previous archaeological research has documented (either at an intuitive or empirical level) that:

- historic sites, especially from the eighteenth century, tend to be situated on high ground adjacent to the Little Pee Dee (i.e., on the bluff edge), while nineteenth century historic sites tend to be situated within 300 feet of old roads (South and Hartley 1980; Taylor 1984:196),

- prehistoric archaeological sites tend to be located adjacent to swamp edges, with relatively few sites located on interior soils (Taylor 1984:195; Ward 1978),

- late nineteenth century and early twentieth century sites tend to be associated with road networks, many of which are still in place (Taylor 1984:196; Trinkley and Adams 1992),

- archaeological sites tend to located on high, well drained soils in proximity to water sources (Brooks and Scurry 1978),

- archaeological sites may be located adjacent to remnant creeks, now represented only as linear expanses of poorly drained soils (Brooks and Scurry 1978; Trinkley 1976),

- archaeological sites are not often found on low, poorly drained soils, and

- prehistoric archaeological sites are not often found on high, well drained soils when they are an excessive distance (ca. 300+ feet) from a water source (Taylor 1984).

In addition, the historical research would be used to illustrate areas of posited occupation.

Chicora Foundation therefore defined essentially two strata with two different levels of archaeological survey:

1. Areas of high archaeological probability are those which incorporated high, well drained soils adjacent to the Little Pee Dee River and Bell Swamp Branch swamp edge or terrace. Along the terrace there is a high potential of identifying either prehistoric or early historic resources, while there is a potential of also finding prehistoric sites along the smaller tributaries (such as Bell Swamp branch).

In these areas Chicora proposed to conduct an archaeological survey using shovel tests in wooded areas at 100 foot intervals on transects spaced at 100 feet from the swamp edge inland at least 1000 feet. A series of 32 transects at 100 foot intervals were established and 393 shovel tests were excavated in wooded areas along the Little Pee Dee River bluff edge.

Typically, shovel tests are conducted at 100 foot intervals. However, the average site size identified by the Santee Cooper Pee Dee survey was 500 feet. In fact, no sites covering less than 400 feet in length were found along the bluff edge. Consequently, these sites can be easily located with transects spaced at 200 feet, particularly in plowed fields or logged areas where surface visibility is good. A series of 24 pedestrian transects at 200 foot intervals were established in plowed fields and logged areas adjacent to the swamps. Occasionally, shovel tests were excavated to verify soil conditions and disturbance. When sites are identified the interval will be decreased to 50 feet or less and testing will continue to establish site boundaries.

There were approximately 250 acres which fell into this category.

2. Areas of moderate to low archaeological probability are those found elsewhere on the tract, specifically as interior or upland parcels. Prehistoric sites were expected to be uncommon and the location of historic sites (largely tenant farms) was projected using historic research and maps.

Approximately 50% of this area was cultivate recently enough to provide good surface visibility. Consequently, the survey of these areas consisted largely of a pedestrian survey, with occasional shovel tests to verify or explore geomorphic conditions such as erosion or deposition. The remaining areas were shovel tested at 200 foot intervals on transects spaced at 200 feet. A series of 58 transects at 200 foot intervals were established and 265 shovel tests were excavated in areas that provided poor surface visibility.

All shovel tests were approximately one-foot square and were excavated to sterile subsoil, usually about 1.0 to 1.5 foot below the existing grade. All soils were screened through ¼-inch mesh and soil profiles were recorded as appropriate, using Munsell soil colors. All shovel tests were backfilled at the completion of the work.

When evidence of archaeological sites was found during the shovel testing, the interval of the tests was decreased, usually to 25 or occasionally to 50 foot intervals, to determine more accurate boundaries. Boundaries were also determined through locating the extent of surface scatters as well as topographic features. For instance, when areas near the bluff obtained a large amount of slope, it was believed that the edge of the site had been reached. This was verified through negative shovel tests and/or a lack of surface material. These boundaries were flagged (where possible) so the precise locations of sites can be added to the development maps by surveyors. The survey team, however, located sites on both development and USGS 7.5' topographic maps during the fieldwork.

Archaeological sites in this survey were defined as consisting of three or more artifacts occurring in a 25 by 25 foot area.

Figure 3 shows the various transect lines used in this study, as well as the areas subjected to pedestrian survey. During the course of the study the about half of the agricultural fields were freshly plowed. Shovel tests, however, continued to be excavated at irregular intervals and all sites identified in the freshly plowed agricultural fields were shovel tested and surface collected to establish boundaries, determine the existence of buried remains, and better assess site eligibility.

Information was collected from each site identified to allow site forms required by the South Carolina State Historic Preservation Office to be completed. In addition, all standing structures over approximately 40 years would be identified by the survey and recorded using the South Carolina State Historic Preservation Office Statewide Survey Site Forms. Shovel testing would be conducted around these structures to examine for archaeological remains present in conjunction with the architectural site.

All archaeological sites were evaluated for their potential significance and eligibility for inclusion on the National Register of Historic Places using criteria such as site integrity and clarity, as well as ability to answer broad questions of importance to the discipline (see Butler 1987 and Glassow 1977). In particular, the assessments followed Townsend et al. (1993).

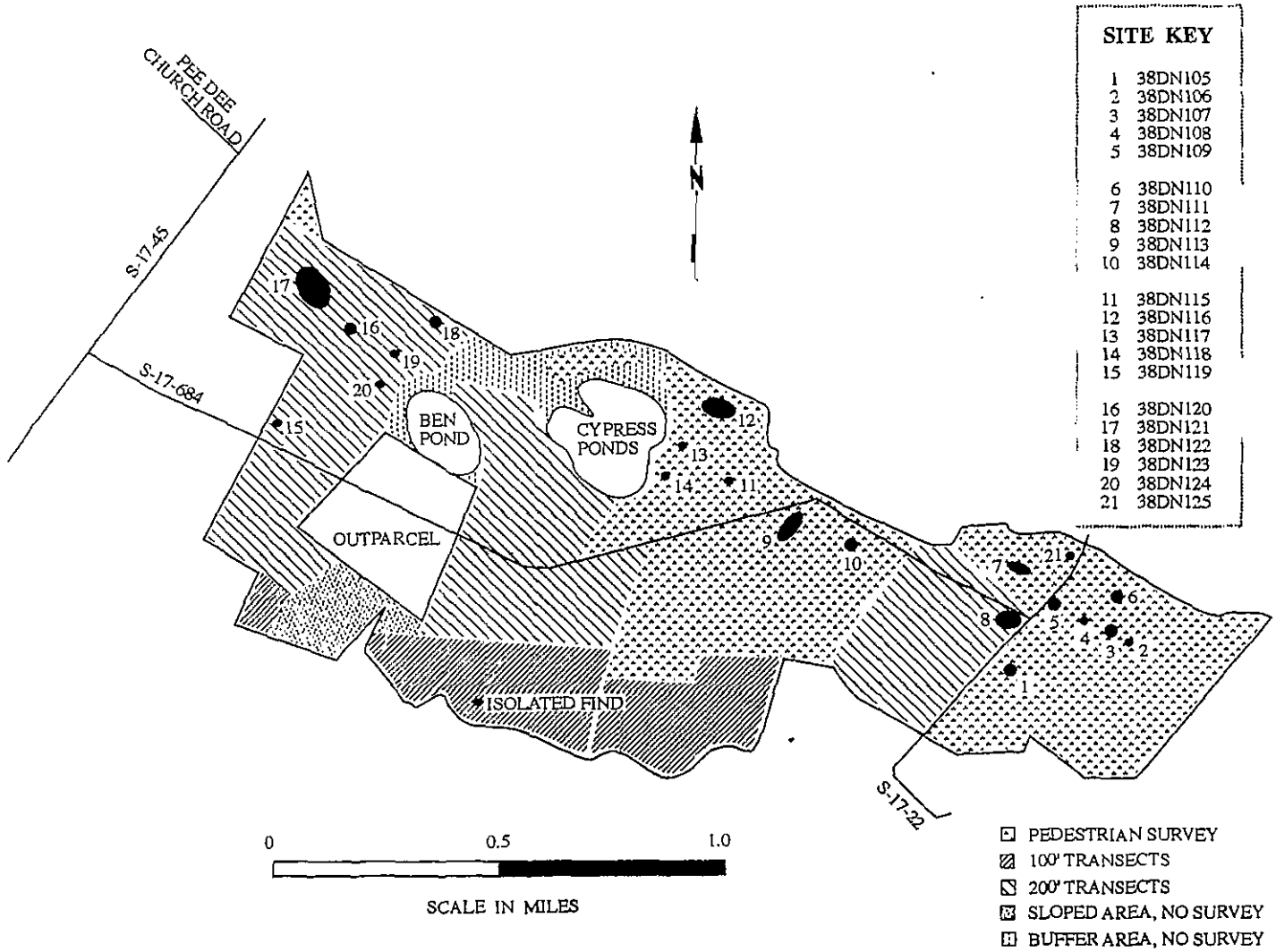


Figure 3. Map showing shovel test transects and pedestrian survey areas.

Figure 4. Crew members shovel testing in planted pine.

Laboratory and Analysis Methods

The cleaning of artifacts and cataloging of the specimens was conducted at the field laboratory in Dillon on November 23, 1993. All artifacts were found to be in stable condition and no further treatment was needed.

As previously discussed, the materials have been accepted for curation by the South Carolina Institute of Archaeology and Anthropology and have been cataloged using that institution's accessioning practices. Specimens were packed in plastic bags and boxed. Field notes were prepared on pH neutral, alkaline buffered paper and photographic material were processed to archival standards. All original field notes, with archival copies, are also curated with this facility. All materials have been delivered to the curatorial facility.

Analysis of the collections followed professionally accepted standards with a level of intensity suitable to the quantity and quality of the remains. Prehistoric pottery was classified using common

coastal Georgia and South Carolina typologies (DePratter 1979; Trinkley 1983) as well as Carolina Piedmont typologies (Coe 1964; South 1959) for pottery and lithics. The temporal, cultural, and typological classifications of the historic remains follow Noel Hume (1970), Bartovics (1981), Miller (1980, 1991), Price (1970), and South (1977).

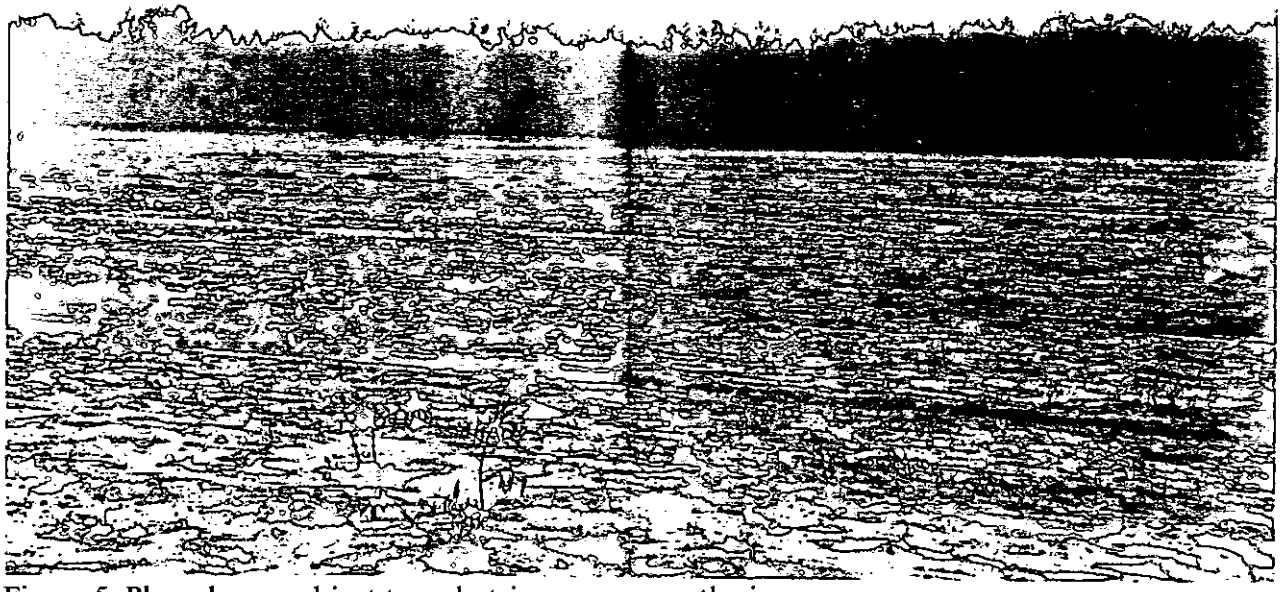


Figure 5. Plowed area subject to pedestrian survey, south view.

PREHISTORIC AND HISTORIC OVERVIEW

Previous Research

Although considerable research has been conducted in the lower coastal plain of South Carolina, little scholarly research has focused on the region inland to the fall line. As of 1991, 14 of the 15 archaeological studies (93.3%) conducted in Dillon County have involved highway construction and have examined only very small, isolated areas of the County. The remaining project involved a historic preservation survey and plan (see Derting et al. 1991). The closest major investigations are found in neighboring Florence County. They include the 1984 survey of the 2700 acre Santee Cooper Pee Dee Electrical Generating Station, which is situated considerably south of the proposed project, but in a similar environmental context (Taylor 1984). The Santee Cooper study identified 103 cultural resources, including 38 prehistoric sites, 33 historic sites, and 32 standing structures. The most intensively used environmental zones were the bluff edge and along minor tributaries. Upland areas were only lightly used, primarily by Woodland Period groups. Another major survey was the 1400 acre Gibson Plantation survey, located on the Pee Dee River, just east of Florence (Trinkley and Adams 1992). Forty-two archaeological resources were identified, including eight with prehistoric components and 38 historic components. Since the survey, two of the sites (38FL240 and 38FL249) have received data recovery (Trinkley et al. 1994). 38FL240 is an antebellum slave through early twentieth century settlement. 38FL249 is a prehistoric site occupied from the early Archaic to the late Woodland period.

For historic settlement, the studies found that eighteenth century sites were found either on the bluff edge, or along major roads. In the nineteenth century the bluff edge was abandoned and settlements were almost exclusively "road-oriented," although they might be set back from the road as much as 300 feet. By the early twentieth century the settlement pattern is less well defined, with tenant sites occurring in a variety of locations (Taylor 1984; see also Trinkley and Adams 1992).

These studies (Taylor 1984; Trinkley and Adams 1992) are important because they were used as the underpinning for current work since they were both performed in similar environmental contexts. The quantity, location, and nature of the sites identified there guided our research design. The results of the current work would test ideas about prehistoric and historic settlement patterns put forth by these works.

The Pee Dee Electrical Generating Station survey identified a total of 103 cultural resources within the 2409 acre tract. These included 38 prehistoric sites, 33 historic sites, nine homesites, 16 tobacco barns, and seven packhouses (Taylor 1984:1). The principle field method used to locate sites was systematic pedestrian survey, augmented by shovel testing in vegetated areas. Tests were placed at "regular intervals (20 to 50 meters) or in favorable locations in irregular topography" (Taylor 1984:54). The bluff edge along the Pee Dee River was partially wooded and the river itself was located within an average of 1000 feet of the bluff. Within 1000 feet of the bluff edge, 11 sites were identified all measuring no less than 400 feet across.

The results of Taylor's work indicated that prehistoric sites were found to occur in four principal settings: bluff edges, minor tributaries, upland areas, and Little Swamp Creek tributary settings. At historic sites, eighteenth century sites were found on the river bluff adjacent to Old River Road. In the nineteenth century, the bluff edge was abandoned as a farmstead, although there was

minor use by tenant farmers. Nineteenth century sites were not immediately adjacent to the road, but were set back as much as 100 meters (Taylor 1984:195-196). Similar results were received during the Gibson Plantation survey (Trinkley and Adams 1992:78-81).

Although there are no detailed studies of Dillon County, the archaeological resources in neighboring Florence County appear somewhat sparse (for example, one site per 26 acres in the Santee Cooper study), especially in the "inland areas". This may be the result of relatively poorly drained soils, an absence of ecological diversity, or other factors. Regardless, archaeological sites seem to be found in rather narrowly defined areas.

Similar prehistoric results were found in a survey of the White Creek drainage in Marlboro County (Ward 1978). There a large number of Archaic and Middle Woodland sites were found on the edges of terraces, overlooking the creek swamp. Ward noted that the survey area, while poor for horticulture, represents a "rich and varied selection of wild plant and animal resources [resulting from its location] in an ecotonal zone" (Ward 1978:57). Wards' work represented the first clearly defined Middle Woodland Yadkin occupation sites in he upper coastal plain of South Carolina.

More recent research at 38SU83 in Sumter County yielded additional information concerning on the Yadkin phase in the upper coastal plain (Blanton et al. 1986). A short term, domestic settlement, 38SU83 documents Yadkin phase ceramic and lithic technology, while offering some very tentative suggestions of a seasonal round and possible caching behavior.

Recent work at 38FL249 indicated that while the Archaic period occupants used a diffuse area of the site, the Yadkin phase occupants concentrated their activities adjacent to a spring head. This suggests that other Middle Woodland sites will be found in a similar environmental context (Trinkley et al. 1994). This work remains one of the few published reports on the excavation of a Yadkin phase site.

Prehistoric Archaeology

The Paleo-Indian period, lasting from 12,000 to 8,000 B.C., is evidenced by basally thinned, side-notched projectile points; fluted, lanceolate projectile points, side scrapers, end scrapers; and drills (Coe 1964; Michie 1977; Williams 1968). The Paleo-Indian occupation, while widespread, does not appear to have been intensive. Artifacts are most frequently found along major river drainages, which Michie interprets to support the concept of an economy "oriented towards the exploitation of now extinct mega-fauna" (Michie 1977:124).

Unfortunately, little is known about Paleo-Indian subsistence strategies, settlement systems, or social organization. Generally, archaeologists agree that the Paleo-Indian groups were at a band level of society (see Service 1966), were nomadic, and were both hunters and foragers. While population density, based on the isolated finds, is thought to have been low, Walthall suggests that toward the end of the period, "there was an increase in population density and in territoriality and that a number of new resource areas were beginning to be exploited" (Walthall 1980:30).

The Archaic period, which dates from 8000 to 2000 B.C., does not form a sharp break with the Paleo-Indian period, but is a slow transition characterized by a modern climate and an increase in the diversity of material culture. Associated with this is a reliance on a broad spectrum of small mammals, although the white tailed deer was likely the most commonly exploited mammal. The chronology established by Coe (1964) for the North Carolina Piedmont may be applied with little modification to the South Carolina coastal plain and piedmont. Archaic period assemblages, exemplified by corner-notched and broad-stem projectile points, are fairly common, perhaps because the swamps and drainages offered especially attractive ecotones.

In the Coastal Plain of the South Carolina there is an increase in the quantity of Early Archaic remains, probably associated with an increase in population and associated increase in the intensity of occupation. While Hardaway and Dalton points are typically found as isolated specimens along riverine environments, remains from the following Palmer phase are not only more common, but are also found in both riverine and interriverine settings. Kirks are likewise common in the coastal plain (Goodyear et al. 1979).

The two primary Middle Archaic phases found in the coastal plain are the Morrow Mountain and Guilford (the Stanly and Halifax complexes identified by Coe are rarely encountered). Our best information on the Middle Woodland comes from sites investigated west of the Appalachian Mountains, such as the work in the Little Tennessee River Valley. The work at Middle Archaic river valley sites, with their evidence of a diverse floral and faunal subsistence base, seems to stand in stark contrast to Caldwell's Middle Archaic "Old Quartz Industry" of Georgia and South Carolina, where axes, choppers, and ground and polished stone tools are very rare.

The Late Archaic is characterized by the appearance of large, square stemmed Savannah River projectile points (Coe 1964). These people continued the intensive exploitation of the uplands much like earlier Archaic groups. The bulk of our data for this period, however, comes from work in the Uwharrie region of North Carolina.

The Woodland period begins by definition with the introduction of fired clay pottery about 2000 B.C. along the South Carolina coast (the introduction of pottery, and hence the beginning of the Woodland period, occurs much later in the Piedmont of South Carolina). It should be noted that many researchers call the period from about 2500 to 1000 B.C. the Late Archaic because of a perceived continuation of the Archaic lifestyle in spite of the manufacture of pottery. Regardless of terminology, the period from 2500 to 1000 B.C. is well documented on the South Carolina coast and is characterized by Stallings (fiber-tempered) pottery. The subsistence economy during this early period was based primarily on deer hunting and fishing, with supplemental inclusions of small mammals, birds, reptiles, and shellfish.

Like the Stallings settlement pattern, Thom's Creek sites are found in a variety of environmental zones and take on several forms. Thom's Creek sites are found throughout the South Carolina Coastal Zone, Coastal Plain, and up to the Fall Line. The sites are found into the North Carolina Coastal Plain, but do not appear to extend southward into Georgia.

In the Coastal Plain drainage of the Savannah River there is a change of settlement, and probably subsistence, away from the riverine focus found in the Stallings Phase (Hanson 1982:13; Stoltman 1974:235-236). Thom's Creek sites are more commonly found in the upland areas and lack evidence of intensive shellfish collection. In the Coastal Zone large, irregular shell middens, small, sparse shell middens; and large "shell rings" are found in the Thom's Creek settlement system.

The Deptford phase, which dates from 1100 B.C. to A.D. 600, is best characterized by fine to coarse sandy paste pottery with a check stamped surface treatment. The Deptford settlement pattern involves both coastal and inland sites.

Inland, sites such as 38AK228-W, 38LX5, 38RD60, and 38BM40 indicate the presence of an extensive Deptford occupation on the Fall Line and the Coastal Plain, although sandy, acidic soils preclude statements on the subsistence base (Anderson 1979; Ryan 1972; Trinkley 1978, 1980). These interior or upland Deptford sites, however, are strongly associated with the swamp terrace edge, and this environment is productive not only in nut masts, but also in large mammals such as deer. Perhaps the best data concerning Deptford "base camps" comes from the Lewis-West site (38AK228-W), where evidence of abundant food remains, storage pit features, elaborate material culture, mortuary

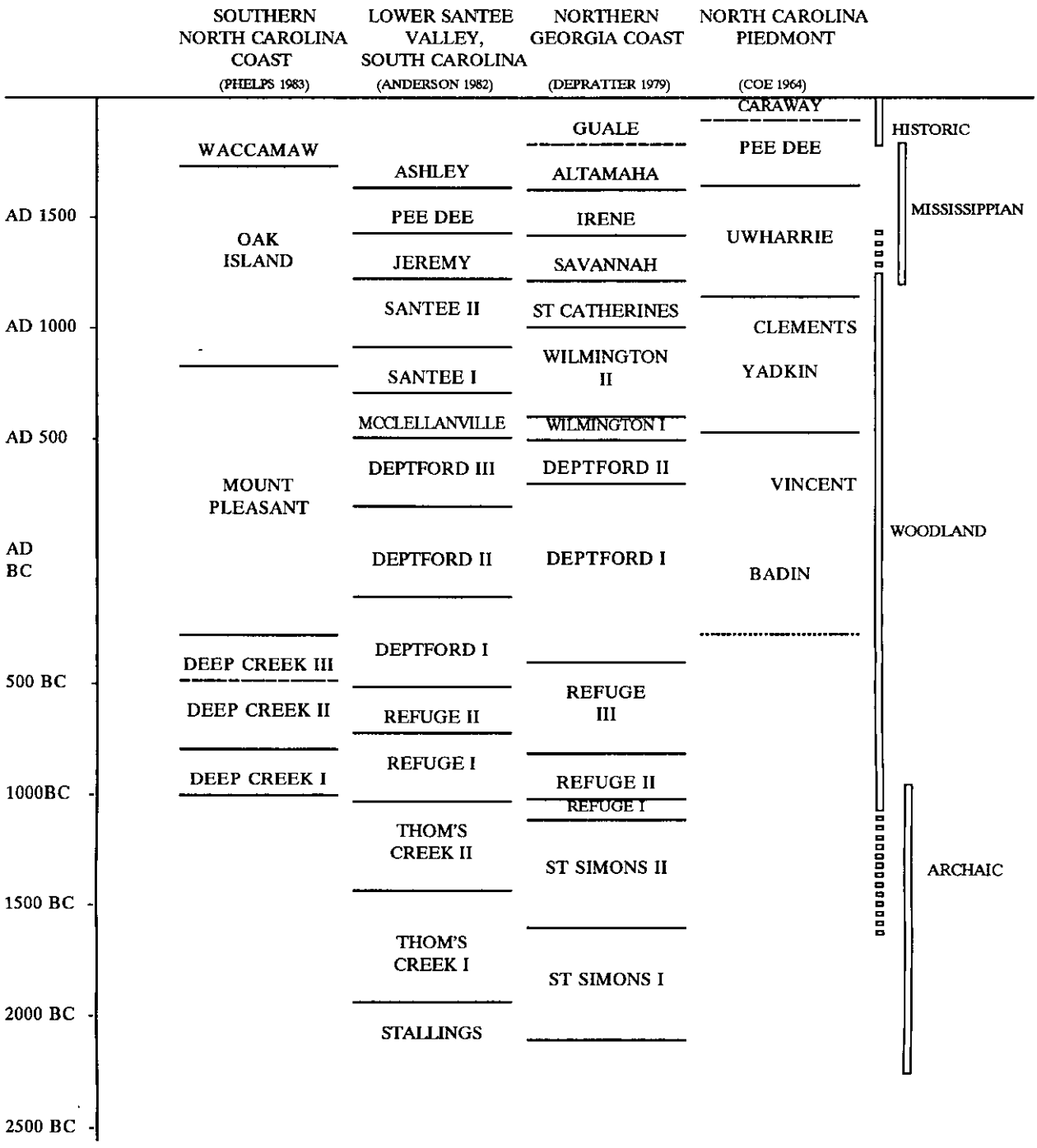


Figure 6. Chronology of the Woodland and Protohistoric periods in the Carolinas.

behavior, and craft specialization has been reported (Sassaman et al. 1989:96-98).

Throughout much of the Coastal Zone and Coastal Plain north of Charleston, a somewhat different cultural manifestation is observed, related to the "Northern Tradition" (e.g., Caldwell 1958). This recently identified assemblage has been termed Deep Creek and was first identified from northern North Carolina sites (Phelps 1983). The Deep Creek assemblage is characterized by pottery with medium to coarse sand inclusions and surface treatments of cord marking, fabric impressing, simple stamping, and net impressing. Much of this material has been previously designated as the Middle Woodland "Cape Fear" pottery originally typed by South (1960). The Deep Creek wares date from about 1000 B.C. to A.D. 1 in North Carolina, but may date later in South Carolina. The Deep Creek settlement and subsistence systems are poorly known, but appear to be very similar to those identified with the Deptford phase.

The Deep Creek assemblage strongly resembles Deptford both typologically and temporally. It appears this northern tradition of cord and fabric impressions was introduced and gradually accepted by indigenous South Carolina populations. During this time some groups continued making only the older carved paddle-stamped pottery, while others mixed the two styles, and still others (and later all) made exclusively cord and fabric stamped wares.

The Middle Woodland in South Carolina is characterized by a pattern of settlement mobility and short-term occupation. On the southern coast it is associated with the Wilmington phase, while on the northern coast it is recognized by the presence of Hanover, McClellanville or Santee, and Mount Pleasant assemblages. The best data concerning Middle Woodland Coastal Zone assemblages comes from Phelps' (1983:32-33) work in North Carolina. Associated items include a small variety of the Roanoke Large Triangular points (Coe 1964:110-111), sandstone abraders, shell pendants, polished stone gorgets, celts, and woven marsh mats. Significantly, both primary inhumations and cremations are found.

On the Coastal Plain of South Carolina, researchers are finding evidence of a Middle Woodland Yadkin assemblage, best known from Coe's work at the Doerschuk site in North Carolina (Coe 1964:25-26). Yadkin pottery is characterized by a crushed quartz temper and cord marked, fabric impressed, and linear check stamped surface treatments. The Yadkin ceramics are associated with medium-sized triangular points, although Oliver (1981) suggests that a continuation of the Piedmont Stemmed Tradition to at least A.D. 300 coexisted with this Triangular Tradition. The Yadkin series in South Carolina was first observed by Ward (1978, 1983) from the White's Creek drainage in Marlboro County, South Carolina. Since then, a large Yadkin village has been identified by DePratter at the Dunlap site (38DA66) in Darlington County, South Carolina (Chester DePratter, personal communication 1985), Trinkley et al. (1994) have excavated a Yadkin site (38FL249) in Florence County, and Blanton et al. (1986) have excavated a small Yadkin site (38SU83) in Sumter County, South Carolina. Anderson et al. (1982:299-302) offer additional typological assessments of the Yadkin wares in South Carolina.

These Middle Woodland Coastal Plain and Coastal Zone phases continue the Early Woodland Deptford pattern of mobility. While sites are found all along the coast and inland to the Fall Line, shell midden sites evidence sparse shell and artifacts. Gone are the abundant shell tools, worked bone items, and clay balls. Recent investigations at Coastal Zone sites such as 38BU747 and 38BU1214, however, have provided some evidence of worked bone and shell items at Deptford phase middens (see Trinkley 1990).

In many respects the South Carolina Late Woodland may be characterized as a continuation of previous Middle Woodland cultural assemblages. While outside the Carolinas there were major cultural changes, such as the continued development and elaboration of agriculture, the Carolina

groups settled into a lifeway not appreciably different from that observed for the previous 500 to 700 years (cf. Sassaman et al. 1989:14-15). This situation would remain unchanged until the development of the South Appalachian Mississippian complex (see Ferguson 1971).

The South Appalachian Mississippian Period (ca. A.D. 1100 to 1640) is the most elaborate level of culture attained by the native inhabitants and is followed by cultural disintegration brought about largely by European disease. The period is characterized by complicated stamped pottery, complex social organization, agriculture, and the construction of temple mounds and ceremonial centers. The earliest phases include the Savannah and Pee Dee (A.D. 1200 to 1550).

Protohistoric Synthesis

The principal secondary sources for the Native Americans of South Carolina are Mooney (1894), Hodge (1910), and Swanton (1952), although a variety of other authors have offered additional insights (see sources such as Brown 1966, Milling 1969, and Rights 1947). Most recently Wilson (1983) has reviewed a wide range of primary and secondary sources, integrating archaeological investigations, and synthesizing the available information. His study, while concentrating on the Siouan hill tribes of North Carolina and Virginia, is of particular relevance to our understanding of South Carolina's protohistoric and early historic inhabitants. This brief review, however, will offer only a generalized version and Wilson (1983) should be consulted for more detailed information (especially for critical reviews of the earlier secondary sources).

The first Native American groups to make contact with the English settlers and explorers were the "feeble and unwarlike coast tribes" (Gregorie 1926:8), such as the Cussoes, Wandos, Wineaus, Etiwans, and Sewees. In the Dillon County area it is likely that the Sara (later Cheraw) comprised the most significant group. A number of authors (see both Leacock 1971 and Wilson 1983) have used a series of discrete episodes, documented through ethnographic and archaeological research, to characterize "Indian history."

During the Late Prehistoric (Leacock's Phase I), the proto-Siouan cultures of the southern Piedmont came into contact with the expanding Muskhogean Pee Dee phase of central South Carolina. According to Wilson (1983:571) this interaction was most intense along the lower Catawba/upper Wateree and lower Yadkin/upper Pee Dee drainages, where the polity came to be known by the Spanish as the Issa or Yssa in the sixteenth century and as the Essaw or Ushery to the English of the late seventeenth century. By the eighteenth century the group was known as the Catawba. Wilson suggests that the Issa and the Indians of the Watered/Catawba drainage were members of the "Grand Chiefdom of Cofitachequi." The second phase, a period of early direct or indirect contact, lasted from the sixteenth century until about 1670, with the founding of a permanent English settlement at Charleston, South Carolina. During this second phase a variety of changes occurred. Cross-drainage contact increased, initially encouraged by Spanish and later English contacts. A variety of new traits, such as the shaft and chamber grave, were introduced from outside the region. Epidemic disease spread throughout the region, devastating the Native American population and causing extensive disruption in the native culture. Wilson (1983:574) suggests that the situation encountered by Juan Pedro two and a half decades after De Soto, is indicative of the early decline of the "Pee Dee" core of Cofitachequi and the growing importance of the Issa. Contact between the Piedmont Siouan groups and the English or Spanish was uncommon and primarily through Indian middlemen, such as the Occaneechi or Tuscarora.

The next phase of the Historic Period, termed Phase II by Leacock, is a period of direct contact by the English with the Siouan groups. Periodic epidemics swept through the Native American population and additional disruptions in native culture were caused by alcohol and the slave trade. Regardless, for nearly three decades the Piedmont Siouan groups traded deer skins and furs to the

English in South Carolina and Virginia.

The final phase, the period when Euro-American governmental control over the Native Americans was instituted, began in the first decade of the eighteenth century. During this period the stresses of contact finally caused most of the non-Catawba groups to abandon the Piedmont. Some groups, such as the Saponi and Occaneechi, moved to Fort Christana. Other groups, such as the Sara, maintained their independence and moved south to the upper Pee Dee River. In 1715 a census of Indian groups reveals that there were 510 "Saraws," although Mooney (1894:60) believes this number probably includes the Keyauwee as well. In 1737 the Sara (also known as the Cheraw by this time), who had the Pee Dea, Waxhaw, and Saxapahaw Indians incorporated with them, moved from the Pee Dee westward to join with the Catawba. In spite of this "incorporation" there is good evidence that the Sara maintained their own dialect and culture at least through the first third of the eighteenth century. By 1751 Governor James Glen reported the Sara "live peaceably within our Settlements" and "are Friends to the English." Among the Catawba, the Sara maintained their own village until all of the Indians were placed on a reservation in the 1760s under the direct control of the South Carolina government. By this time there were only 50 or 60 Sara still living. This move ended the "history" of the Piedmont Indian groups during what we term as the Historic Period.

Into this discussion Stokes offers an interesting sidebar discussion concerning the "Croatan" Indians which is worthy of brief mention in these discussions:

> For many years considerable speculation has been made about the origin and identity of the "Croatans" or "Croatan Indians" of Robeson County, North Carolina. Some of these people have migrated across the line into the adjoining Dillon area and live there today. One conjecture is that the Charraw intermingled with other Indians and their descendants eventually formed this group. Another supposition, and the most romantic, is that these people are the descendants of Indians and the survivors of Sir Walter Raleigh's famous "Lost Colony." There are numerous other theories, none of which has been substantiated, and the Croatan puzzle remains a mystery. As far as been determined, the Charraw [Sara] were the original Indian inhabitants of present Dillon and the tribe is extinct today (Stokes 1978:n28).

Swanton was the first to suggest that while the bulk of the Keyauwee were likely incorporated with the Catawba, some "of their descendants are represented among the Robeson County Indians, often miscalled Croatan" (Swanton 1952:81). Regrettably, Swanton offers no evidence for this assertion, regardless the view caught the attention of the public and accounts such as the one offered in the WPA Guide became common:

> In Dillon County live a number of Croatans, a peculiar and primitive people, the majority of whom are found in North Carolina'. Ethnologists assert they are racially a mixture of Indian, pioneer white, and Negro . . . . Only in recent years have the Croatans been benefited by schools and social agencies which have taken cognizance of their isolation and penetrated their ancient resentment (Work Projects Administration 1988[1941]:464-465).

While the exact background of this group is still under investigation, Stokes is correct that the Robeson County groups had little, if any, impact on either the prehistory or early history of the Dillon area.

Historic Synthesis

What is today known as Dillon County was originally part of Craven County and subsequently

part of Parish of Saint James Santee when it was created in 1706. The area next was divided to form the northern tips of both the Parishes of Prince George Winyah and Prince Frederick, formed in 1721 and 1734 respectively from a section of Saint James Santee. Later Dillon formed part of the George Town District Court when it was established in 1769, later becoming Liberty County with the subdivision of the George Town District in 1785. The name was changed in Marion District in 1798 and then Marion County in 1868 (Stokes 1978:4).

When the historic resources of this portion of South Carolina are examined, few pre-date the late nineteenth century. Latta, Dillon's second largest town, was developed in an area previously known as Nellie's Field. Like the town of Dillon, Latta began in 1887 with building of the new rail line (Anonymous 1970:11). Dillon's other major community, Lake View, was incorporated in 1907 as Page's Mill, although the name was changed to Lake View in 1916. Older resources include the Cotton Press Farm, five miles west of Latta on S.C. 38, portions of which date to 1791 when it built by John Hayes. The Bear Swamp Baptist Church is situated on the site of a meeting house built in 1785 on the north bank of Bear Swamp at a point midway between Fayetteville, North Carolina and Georgetown, South Carolina. The original meeting house burned in 1825 and rebuilt in 1830-1 (Anonymous 1970). The W.C. Parham House, of two-story frame construction, is thought to have been constructed ca. 1840 by Woodward Manning (Simpson 1984:146).

The Dillon region was described by the Methodist bishop, Francis Asbury, in glowing terms during the post-Revolutionary period:

> We crossed Little Pee Dee at the Potatoe Bed Ferry. Beautiful deep sands, live oaks, lofty pines, palmetto swamps, with intermingled gums and laurel, and twining jessamine flinging its odours far and wide around; lawns and savannahs such is the country, and such the charming scenes through which we have frequently passed in our late rides (quoted in Stokes 1978:7).

And while this description is indeed romantic, as Stokes comments that:

> However inspiring this prospect is today . . . the dense foliage and lush growth of the bogs and marshy river lowlands greatly impeded the actual settlement and subsequent cultivation of the region in South Carolina's colonial period. . . . rivers and streams were extensively used as arteries of travel and transportation in the lowcountry of South Carolina. But the meandering watercourses of the Pee Dee and its tributaries were all bordered by morasses choked with wiry vegetation that were the habitat of alligators, dangerous reptiles, and pestilent insects, making access to and from the streams exceedingly difficult (Stokes 1978:8).

A northern visitor perhaps said it more succinctly:

> South Carolina, at least the region traversed by railway, is the most miserable country I ever saw. Swamp, swamp, swamp, all day long. No villages, no houses, no inhabitants, no garden fields, nothing but an interminable swamp. Every half-hour we stop in the middle of the swamp (Lyman Abbott quoted in Drago 1991:15).

Consequently, while the early settlement did focus on the Great and Little Pee Dee and their tributaries as both transportation and communication routes, the process was slow settlements were sparse. The earliest settlers entered the region, primarily from North Carolina and Virginia, during the mid-eighteenth century (Dudley 1979). The 1775 Mouzon map (Figure 7) documents this pattern of early settlement in Dillon County, with a focus on inland creeks with easy access to the major rivers. It is only during the nineteenth century that maps begin to show settlement expanding along

the developing road systems.

Settlement during the early eighteenth century was also hampered by the remote location of Dillon, which isolated it from other sections of the Carolina backcountry. The two principal trade routes from Charleston into Virginia -- one west of Great Pee Dee towards Charlotte, the other along coast through Georgetown and Wilmington -- skirted Dillon to the east and west, providing little direct access to the region (Stokes 1978:9). The backcountry lands were often purchased for speculation, although those who settled the region probably first participated in the simple economy beef production -- allowing cattle to range through swamplands. This required little capital and could be accomplished with little labor. Later it is likely that the region participated in indigo cultivation, although it seems certain that semisubsistence farming was always the primary occupation.

While geographically part of the Coastal Plain, the Dillon and Pee Dee region continued to be too remote and isolated from the seat of government in Charleston during the early eighteenth century to feel the "taming influences of church and state (King 1981:7). More to the point, however, there were a variety of serious complaints the Pee Dee region (as well as the rest of the "lower middle country") had with Charleston. These included both a lack of adequate law enforcement as well as economic policies which hurt the region. These problems created a division between the wealthy planters of Charleston and the small farmers more typical of the interior. In the wake of what many called broken trust, the Regulator movement was created, dominating Dillon like other regions of the backcountry (see Brown 1963 for additional details).

By the time the Regulators disbanded they had achieved considerable success in reforming the political and economic structure of the region. The Circuit Court Act of 1769 established a system of courts, jails, and sheriffs in four newly created backcountry judicial districts. They had also succeeded in electing six of their candidates to the colonial assembly. Regulations on deer hunting were passed, and many of the Regulators were pardoned for various offenses. Certainly it helped that prominent lowcountry planters were also expanding their own economic interests into the backcountry. Klein (1990:77) notes that while deep suspicions still existed between the sections, there was an increasing awareness of the powerful economic interests which were drawing the regions closer together.

One of these interests was the brewing revolution. Like other areas dominated by Regulator philosophies, when the American Revolution began there was very little enthusiasm for the goal of freedom from Britain in the Dillon area. In fact, it wasn't politics of the realm, but the politics of confiscation which eventually goaded the upcountry residents into the war. Neutrality faded with the increasingly common "predatory incursions" of Tories from the Scotch settlements in the Cape Fear Valley (Stokes 1978:32). Three skirmishes were fought in the general Dillon area. The first was the attack on Brown's Regiment in Bear Swamp on October 30, 1780. The second, at Catfish Creek near Hulin's Mill, later known as Bass' Mill, occurred in April 1781. The third, in August 1781, was the battle fought near the Great Pee Dee and Marsh Creek in both Marion and Dillon counties (Stokes 1978:39-42).

Another interest drawing together backcountry and low country was slavery. In 1760 the entire backcountry had only 2,417 African American slaves, representing 4% of the total slave population in Carolina. In contrast, the lowcountry contained 44,501 slaves, representing at least 77% of the total slave population of Carolina (Klein 1990:19). In order to expand production and enter the colonywide trade pattern, some backcountry planters were expanding their slave holdings. By 1768 about one-twelfth of South Carolina's slaves lived in the backcountry, where they represented about 20% of the population. In the early 1770s a wealthy Charleston slave merchant, Peter Manigault, remarked that:

> The great Planters have bought few Negroes within these two Years. Upwards of two thirds that have been imported have gone backwards. These people some of them

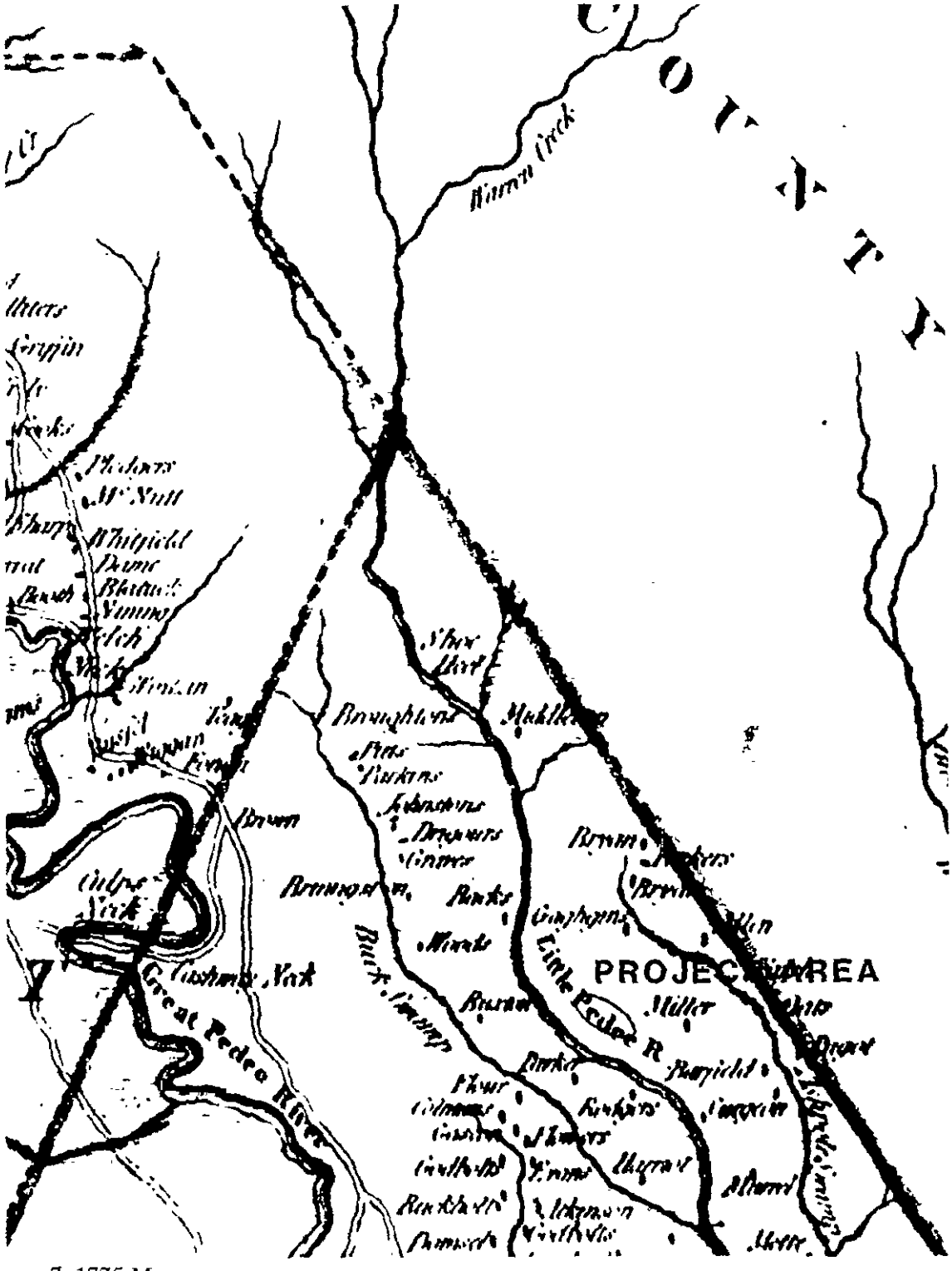


Figure 7. 1775 Mouzon map.

> come at the Distance of 300 miles from Chs Town, and will not go back without Negroes, let the Price be what it will. And indeed they can afford it, for it is no uncommon Thing among them to make 150 wt of Indigo to a Hand, and Even at the present price of Indigo and Help, as their Lands cost them little they can well afford to pay £450 for a Negro (quoted in Klein 1990:20).

Even before the Revolution the backcountry's wealthiest slave holders were concentrated below the fall line, in the region which would later be termed the "middlecountry" and which contained today's Dillon County. This middle territory provided somewhat easier access to markets and formed a transition zone into the "true" backcountry. In 1770 the 221 plantations of the middlecountry had 1,432 slaves compared to the 177 slaves on the 83 upcountry plantations. The top quintile of the middlecountry plantations had a value of £274,103, compared to only £50,412 for the top quintile of upcountry estates (Klein 1990:22). Into the early 1800s the middlecountry, and especially the Cheraws region, remained transitional between the predominately slave owning lowcountry and the yeoman upcountry. Slaves in the middlecountry composed about a third of the whole population and slave holders composed about a third of all households.

Cotton, while was making inroads and creating a greater demand for African American slaves in some middlecountry regions (especially around Camden where a new plantation elite was developing), had relatively little impact on the Cheraws or Dillon area. For example, while the slave population increased 139% from 5,519 to 13,202 between 1790 and 1800 in the Camden area, it increased only 51% in the Cheraws, where the number of slaves grew from 3,229 to 4,877. By 1810 there were 6,079 slaves in the Cheraw region, an increase of only 25% from 1800 (Klein 1990:253).

In the early nineteenth century Robert Mills remarked that Marion (then containing the land which would later form Dillon County) was noted for its swamps, which offered the most productive, richest soils, especially compared to the upland which was sandy. When reclaimed and "secured from freshets" the swamps brought $50 an acre, compared to only $1 an area for the upland pine lands (Mills 1972 [1826]:623). Plantations, while not common, planted cotton, corn, potatoes, and wheat. The 1826 Mills' Atlas for Marion District shows both Carmichael's and Campbell's bridges over the Little Pee Dee River (Figure 8), apparently established in the late eighteenth or early nineteenth centuries (Stokes 1978:9). In addition, the map shows the Carmichael settlement in the eastern portion of the project tract and a mill is shown situated west of Bell Swamp Branch and north of the associated road. The road itself has stayed in nearly the identical location throughout the nineteenth and twentieth century, although eventually the bridge was abandoned. Even today the Fork USGS topographic map notes the presence of Carmichael Crossroads on the north side of Bell Swamp.

In 1850 Marion County was inhabited by 9,781 whites and 7,520 blacks, although the county exhibits a relatively modest standing when its agricultural production is examined. Marion ranked 17th (out of 29) in cotton production, with a yield of 8680 bales (or 3,472,000 pounds) of ginned cotton and 17th in corn production, with 476,718 bushels. Only 817 pounds of tobacco and 2,986 bushels of wheat were produced. Marion did, however, rank in the top 10 rice producing counties, with 513,825 pounds largely being harvested from inland swamps (DeBow 1854:304-307).

The Civil War was relatively gentle on the Pee Dee region, although Sherman's troops traveled through the valleys of both Pee Dees in 1868, causing extensive damage and loss (Stokes 1978). After the Civil War and the emancipation of the large slave population the plantation system as it existed prior to the war was radically altered through the adoption of labor contracts and later cash tenancy. In many respects the labor contracts established a new form of slavery -- being as strict as bondage and offering as little hope of economic and social freedom. A typical labor contract after the war required black laborers to perform "any and all kinds of work usually done on a plantation" and "to stay on the place all the time." The laborers were required to:

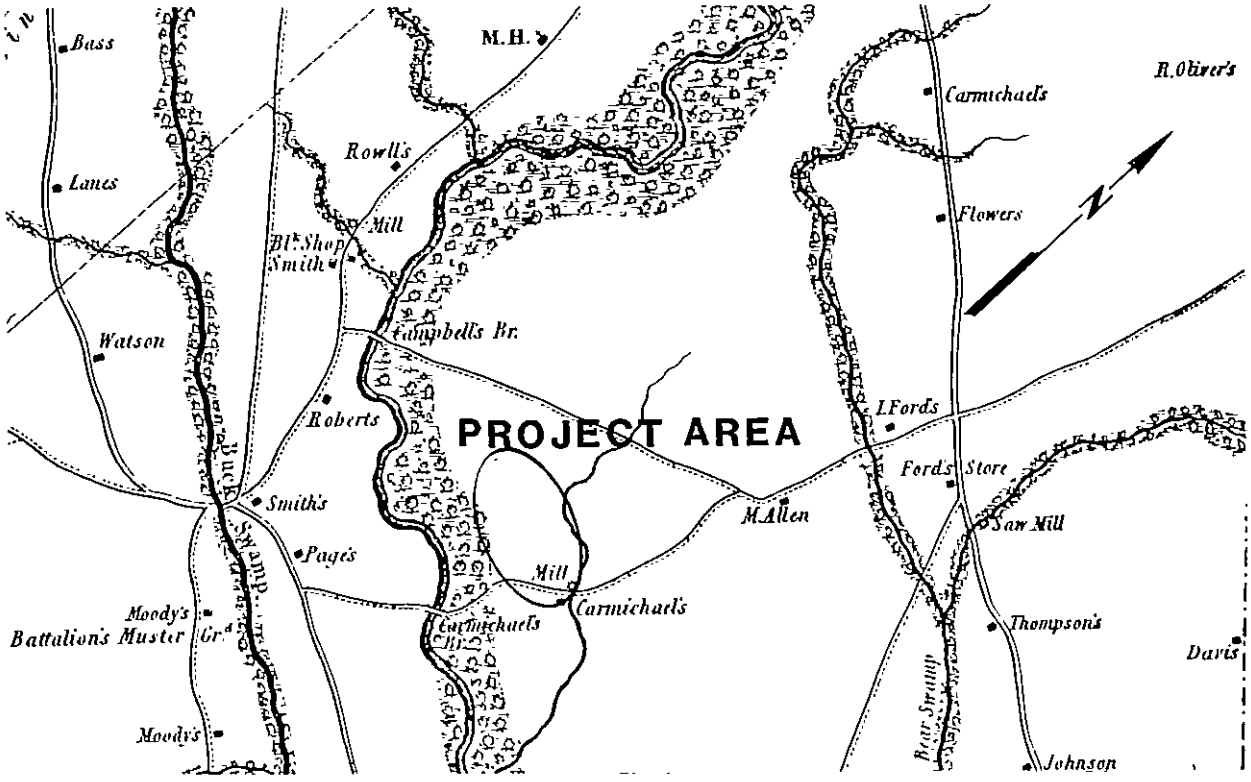


Figure 8. Mills' Atlas of 1826 showing a portion of the Marion District.

> get up at daybreak and do such small jobs about the house that are to be done before Breakfast, to have their Breakfast eat and ready to go at regular work by the time the sun in fully up and work all day except one hours and a half for Dinner from the 1st of May until the 1st of October and one hour for Dinner the balance of the year.

Furthermore, parents were required to "see that their children work," and to assume accountability for their offspring if they lost or broke tools or damaged the farm animals by abuse. A typical contract gave blacks "sixty bushels or corn, and board for himself wife & six children with three suits of clothing during the year and Leather enough to make himself wife and Their oldest children one pair of shoes" (Stokes 1978:95).

Sidney Andrews, a journalist who toured South Carolina in 1865, found the blacks in Marion District "orderly," though receiving what he considered starvation pay. He also found the white landowners uncooperative in complying with their part of the contracts, often delaying payments after harvest, or refusing to provide promised provisions for minor infractions (Stokes 1978:97-98). This reaction to blacks was predictable -- in 1869 the local newspaper, the *Star*, remarked "THE OWNERS OF THE SOIL MUST CONTROL THE LABOR" and added, "Those who own the soil should govern it." Eventually the Jim Crow laws codified a new form of black slavery which lasted well into the twentieth century.

Efforts to recover after the Civil War were hindered not only by the repressive nature of

Southern whites, but by an associated slump in agricultural production which dramatically reduced cash flow. In 1870 the Marion area produced only 5267 bales of cotton, down by nearly 40%. Corn production, as an indicator of subsistence rather than cash farming, was down by 50%. Some recovery was taking place by 1890, when corn production was up to 401,788 bushels, although this was still 16% less than the 1850 corn production. Cotton, however, was up to 25,993 bales -- an increase over 1850 levels by nearly 200% (Stokes 1978:119).

By the 1880s Marion's agricultural system was reportedly dominated by wage labor, although at least 500 farms were "rented" by blacks and another 1,000 farms were worked by blacks (*The News and Courier* 1884). In addition to agriculture, the county also boasted 90 flour and grist mills, 31 lumber mills, 22 turpentine stills, and one foundry. Stokes (1978:95) observes that while industries such as turpentine and rosin production provided relatively little income, they were steady. The greatest problem, however, remained transportation and getting items to the lowcountry markets. Consequently, settlement and economic growth remained sparse and poor until the development of the Atlantic Coastline Railroad between 1887 and 1888. The Atlantic Coast Line Railroad wanted to join its lines between North Carolina and Florence and while the shortest route was via Little Rock (northwest of present Dillon), right-of-way could not be acquired. A local resident, James W. Dillon, offered the rail line half interest in an alternate route with the single stipulation being that a stop be established in the vicinity of what is today Dillon (Anonymous 1970: 5). Commenting on the new town of Dillon, one observer remarked that:

> His municipal namesake is a town of wide streets that begin in fields of tobacco, cotton, and wheat, and end at the courthouse, which covers the site of Revolutionary war skirmishes. Produce flows in to be shipped to Eastern and Northern markets by rail or truck. A textile mill and other factories have brought industrial interests into this farming area. Older residents remember when the business section was a pond where they caught trout, redbreast, and bream (Work Projects Administration 1988 [1941]:464).

Into the twentieth century Marion continued to be a rather sleepy county. By 1900 the population was only 35,181. In the first decade of the twentieth century cotton was planted on 32,904 acres, second only to corn and producing 31,488 bales (there were even two cotton mills in the county). Tobacco, made popular by the adoption of bright leaf flue-cured varieties, was planted on 7,336 acres and produced 6,145,000 pounds (Watson 1907:576).

Incorporation in February 1910 established Dillon as a separate political and judicial entity from Marion County. Resulting from complaints primarily centered on transportation problems and the distance from the county seat, this step established a more "manageable county encompassing about half the acreage of previous Marion County. One of the earliest surveys of the new county, "Map of Dillon County, South Carolina," compiled by Otis M. Page in 1919-1920 shows the project area situated in Bermuda District 17. While there are a variety of landowners surrounding the tract, the only one clearly shown on the property is Mike Carmichael, situated in the northeast corner of the property (Figure 9). The map also reveals that although modern S-45 had not yet been constructed across the Little Pee Dee, the tract was bisected roughly east-west by a major artery (which is today an abandoned dirt road).

Dudley (1978) noted that the population of Dillon steadily declined in the first third of the twentieth century, largely the result of a depressed economy and poor agricultural practices which caused extensive sheet erosion. It was only in the second half of this century that the population steadied and once again began to increase. By 1921 there were 60,000 acres in cotton producing 35,000 bales and 31,000 acres planted in corn with a yield of 589,000 bushels (Stokes 1978:228).

Figure 9. Map of Dillon County, 1909-1910.

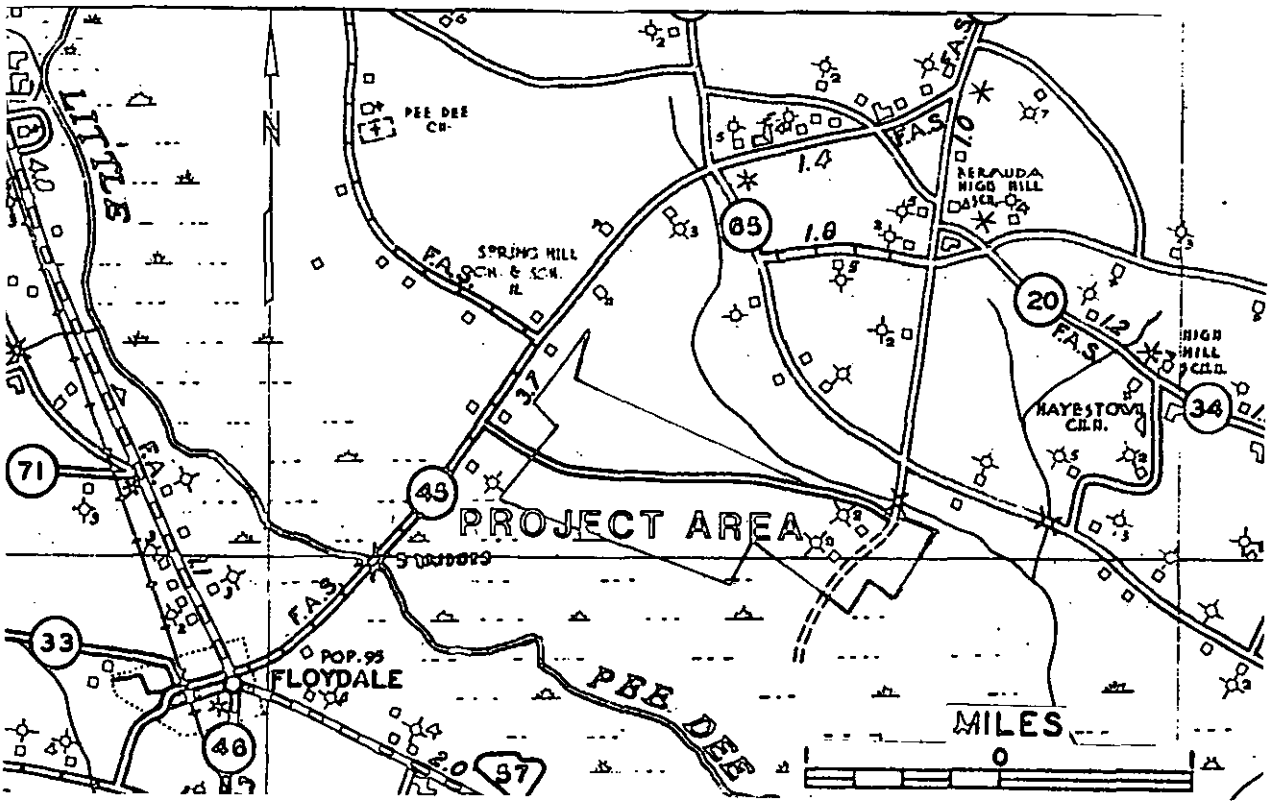


Figure 10. 1938 "General Highway and Transportation Map" of Dillon County.

In 1938 the "General Highway and Transportation Map Dillon County" reveals that S-45 had been constructed to span the Little Pee Dee with a series of five bridges and that the east-west road was still active. There are two settlements shown on the tract, both situated on the east edge and consisting of a farm unit with two tenant houses (Figure 10). To the west of the survey tract was the "Spring Hill Church and School," labeled "Negro" on the map, while to the north was the north was the Bermuda High Hill School, apparently for white children.

IDENTIFIED ARCHAEOLOGICAL SITES

As a result of the archaeological survey, 21 sites were identified. These include seven sites with prehistoric components, and 17 sites with historic components. Of these 21 sites, two are considered eligible for inclusion on the National Register of Historic Places. These sites include 38DN116, a Middle Woodland phase site, and 38DN121, an early twentieth century tenant/yeoman farmer complex.

No standing structures older than 40 years were located, except for an extant tobacco barn associated with 38DN121. This barn will be discussed under the site description.

38DN105 is located in a plowed field with good surface visibility just south of S-17-22. The site consists of a small scatter of twentieth century remains including two fragments of green bottle glass and one jar lid liner. These remains were surface collected from a 100 by 100 foot area. Eight shovel tests were excavated at 25 foot intervals in a cruciform pattern across the site. None of these tests yielded subsurface remains.

The central UTM coordinates are E658200 N3800280 and the soils are well drained Kenansville sand. The plow zone was found to a depth of 1.1 feet and was dark grayish brown (10YR4/2) overlying brownish yellow 10YR6/6 subsoil.

Because of the sparsity of remains, their scattered distribution, and the damage the site has received through plowing, 38DN105 does not have the data sets or the integrity to address significant research questions relating to twentieth century rural lifeways. As a result, the site is recommended as not eligible for inclusion on the National Register of Historic Places.

38DN106 is located in a plowed field approximately 900 feet east of S-17-22. The site consists of a small scatter of late nineteenth and early twentieth century materials in a 100 by 150 foot area. Surface visibility was good and a collection was made. Artifacts include one blue edged whiteware (MCD=1853; Bartovics 1981), one blue hand painted whiteware (MCD=1848; Bartovics 1981), two undecorated whitewares (MCD=1895; Bartovics 1981), and one green bottle glass. The ceramics yield a mean ceramic date of 1873. Ten shovel tests were excavated at 25 foot intervals in a cruciform pattern across the site. No subsurface remains were encountered.

The central UTM coordinates are E658590 N3800380 and the soils are somewhat excessively drained Pocalla sands. The plowzone was found to a depth of 0.9 feet and was dark grayish brown (10YR4/2) overlying pale brown (10YR6/3) subsoil.

The site is badly disturbed by plowing and the remains are sparse and scattered. Because of these factors 38DN106 does not have the data sets or integrity address questions significant to late nineteenth/early twentieth century research. This site is recommended as not eligible for inclusion on the National Register of Historic Places.

38DN107 is located in a plowed field approximately 600 feet east of S-17-22. The site consists of a scatter of late nineteenth/early twentieth century materials in a 200 by 200 foot area. Surface visibility was good and a collection was made. These remains include nine undecorated whitewares

(MCD=1895; Bartovics 1981); one blue transfer printed whiteware (MCD=1848; Bartovics 1981); two polychrome handpainted whitewares (MCD=1848; Bartovics 1981); two annular whitewares (MCD=1866; Bartovics 1981), one sponge decorated whiteware (MCD=1855; Ketchum 1983), one blue edged whiteware (MCD=1853; Bartovics 1981), and one glass jar liner. The ceramics yield a mean ceramic date of 1877. Fifteen shovel tests were excavated at 25 foot intervals in a cruciform pattern. None of these tests yielded subsurface remains.

The central UTM coordinates are E658540 N3800420 and the soils are somewhat excessively drained Pocalla sands. The plowzone was found to a depth of 0.9 feet and was dark grayish brown (10YR4/2) overlying pale brown (10YR6/3) subsoil.

The site is plowed and contains sparse remains scattered over a relatively large area. As a result, 38DN107 does not have the data sets or integrity to address significant research questions relating to late nineteenth/early twentieth century lifeways. This site is recommended as not eligible for inclusion on the National Register of Historic Places.

38DN108 is located in a plowed field approximately 400 feet east of S-17-22. The site consists of a scatter of twentieth century materials in a75 by 100 foot area. Surface visibility was good and a collection was made. In addition, nine shovel tests were placed in the site area at 25 foot intervals in a cruciform formation. Of those nine tests, five yielded subsurface remains. These remains are summarized in Table 1.

Table 1.
Artifacts recovered from 38DN108

Artifacts	Surface	Center	25'N	25'S	25'W
Undec. whiteware	1				
Cream colored whiteware	1				
Clear bottle glass	3	3			3
Can fragments	1		1	3	1

Datable ceramics include two undecorated whitewares which have a mean ceramic date of 1895 (Bartovics 1981).

The central UTM coordinates are E658500 N3800470 and the soils are excessively drained Lakeland sand. The plowzone consisted of dark brown (10YR4/3) sand overlying brownish yellow (10YR6/6) subsoil.

The site has been dispersed by plowing and shovel testing revealed no evidence for subsurface features. 38DN108 cannot address significant research questions relating to twentieth century lifeways. As a result, this site is recommended as not eligible for inclusion on the National Register of Historic Places.

38DN109 is located just east of S-17-22. The core of the site is located in a clump of trees while the periphery has been plowed. Within the clump of trees are the ruins of a house, probably constructed in the twentieth century, based on the presence of wire nails in the collapsed timbers. Three chimney piles, a set of brick stairs, and some collapsed timbers are all that remain of the house. Based on historic maps (i.e. Mills Atlas 1826) and artifactual remains, an earlier house was located at the site. Mills refers to the owner as Carmichael (see Figure 8).

Within the plowed area of the site, surface visibility was good. In addition to the surface collection, 13 shovel tests were placed at 50 foot intervals in a cruciform pattern across the site. Of

these tests, only four yielded subsurface materials. Table 2 summarizes the materials recovered from 38DN109. Datable artifacts indicate that the site may have been initially occupied by about 1800. Table 3 shows the mean ceramic date for 38DN109 as 1878, although the diversity of ceramics indicates a long range of occupation. Kitchen related artifacts represent 90% of the collection whereas architecture related artifacts represent 1.4%.

Table 2.
Artifacts Recovered from 38DN109

Artifacts	**Surface**	**50'W**	**50'N**	**100'N**	**200'E**
Undec. creamware	1				
Undec. pearlware	6	1			
Undec. whiteware	27				
Black tp. whiteware	1				
Green tp. whiteware	1				
Ann. whiteware	6				
Blue edged whiteware	2				
Handpainted whiteware	3				
Sponged whiteware	1				
Decal. whiteware	1				
Porcelain	1				
Alkaline glz. stoneware	3				
Clear bottle glass	3	2	1	1	
Amethyst glass	1				
UID nail	1				
Ink well fragment	1				
Pipe stem	1				
Pipe bowl	1				
UID iron					3
Oyster shell frag	1				

Table 3.
Mean Ceramic Date for 38DN109

Ceramic	**(xi)**	**(fi)**	**fi x xi**
Undec. creamware	1791	1	1791
Undec. pearlware	1805	7	12635
Undec. whiteware	1895	27	51165
Non-blue transfer printed whiteware	1851	2	3702
Annular whiteware	1866	6	11196
Blue edged whiteware	1853	2	3706
Handpainted whiteware	1848	3	5544
Sponged whiteware	1853	1	1853
Decal. whiteware	1926	1	1926
White porcelain	1883	1	1883
Total		**51**	**95411**

MCD = 95411 ÷ 51 = 1878

The central UTM coordinates are E658400 N3800490 and the soils are classified as excessively drained Lakeland sand. The plowzone consisted of dark brown (10YR4/3) sand overlying brownish yellow (10YR6/6) subsoil. The site measures approximately 300 by 250 feet.

38DN109 is recommended as not eligible for inclusion on the National Register of Historic Places. Although the core of site has intact architectural features, these features are related to a twentieth century structure which was still being occupied in 1959 (Figure 2). This house was built on the site of a late eighteenth/early nineteenth century domestic site associated with the Carmichael family. The peripheral portions of the site are within a plowed field. Despite the excavation of 13 shovel tests, only four yielded subsurface remains which indicate that the site has been heavily impacted by plowing. The site yielded limited data sets, particularly relating to the late eighteenth/early nineteenth century. Shovel testing indicated that any remains of the earlier structure have been obliterated either by plowing or by construction of the later house.

38DN110 is located approximately 800 feet east of S-17-22 in a clump of trees in the center of a plowed field. The site consists of a standing brick chimney in the wooded area with a scatter of early to mid twentieth century domestic materials in the surrounding plowed field. Surface visibility was good in the plowed field and a collection was made. In addition, seven shovel tests were excavated at 25 foot intervals in a cruciform pattern, using the chimney as a central position. Of these seven tests, three yielded artifactual remains. These remains are summarized in Table 4.

Table 4.
Artifacts Recovered from 38DN110

Artifacts	**Surface**	**ST1**	**ST3**	**ST4**
Undecorated whiteware	7			
Decal porcelain	1			
Clear vessel glass	2	1	2	5
Amethyst bottle glass	3			
Aqua bottle glass				3
UID iron		1		1

Undecorated whitewares have a mean ceramic date of 1895 and decalcomania has a mean date of 1926 (Bartovics 1981). As a result, the site yields a mean date of 1898.9.

Based on the surface remains and shovel tests, the site measures 100 by 75 feet. The central UTM coordinates are E658660 N3800440 and the soils are excessively drained Lakeland sand. The plowzone consisted of 1.0 foot of dark brown (10YR4/3) sand overlying brownish yellow (10YR6/6) subsoil.

Beyond the extant chimney, no other architectural features (such as pier supports) were located. The yard area has been dispersed by plowing and shovel testing revealed no evidence for subsurface features. As a result, 38DN110 is recommended as not eligible for inclusion on the National Register of Historic Places. The site contains limited data sets and has little integrity. It is unlikely that the site can add significant information about the lifeways of early twentieth century tenant farmers.

38DN111 is a Middle Woodland site located on the edge of Bell Swamp Branch next to a woodsline in a plowed field and is approximately 600 feet west of S-17-22. Surface visibility was good and a collection was made. In addition, 20 shovel tests were excavated at 25 foot intervals in a cruciform pattern. Of those 20 tests, only one yielded subsurface remains. Surface collected from the

site was one Hanover cordmarked sherd, one Yadkin check stamped sherd, two UID sherds, 10 small sherds, three rhyolite debitage, one quartz debitage, and the base of an unidentifiable stemmed rhyolite projectile point. The one positive shovel test yielded one gray salt glazed stoneware.

The central UTM coordinates are E658260 N3800640 and the soils are excessively drained Lakeland sand. The plowzone consisted of 1.0 foot of dark brown (10YR4/3) sand overlying brownish yellow (10YR6/6) subsoil. Based on surface remains the site measures approximately 200 feet east-west by 100 feet north-south.

Despite the excavation of 20 shovel tests, only one yielded subsurface remains. This provides clear evidence that the site has been badly damaged by plowing. As a result, the site cannot answer significant questions concerning the Middle Woodland occupation of Dillon County. Therefore, 38DN111 is recommended as not eligible for inclusion on the National Register of Historic Places.

38DN112 is located at the southwest intersection of S-17-22 and S-17-684. The site was originally identified during regular shovel testing as surface remains of a burnt outbuilding with an adjacent trash dump. This building was shovel tested at 50 foot intervals with seven shovel tests. Of those seven tests, only one yielded subsurface remains. They included three fragments of aqua glass and one unidentifiable nail fragment. A pedestrian survey was conducted in the surrounding area to identify any evidence of additional above ground structural remains. None were found. However, several twentieth century trash piles were noted along county road 684 which were originally believed to be associated with dumping episodes by locals although it is possible that these dumps may be associated with the twentieth century occupation of 38DN112. Based on the location of the burnt structure and the trash dumps the site is approximately 300 feet north-south by 400 feet east-west.

The central UTM coordinates are E658200 N3800420 and the soils are well drained Kenansville sand. The Ap horizon was found to a depth of 0.8 and was dark grayish brown (10YR4/2) overlying brownish yellow 10YR6/6 subsoil.

38DN112 is recommended as not eligible for inclusion on the National Register of Historic Places. The only above ground remains was the brick foundation to an outbuilding. It appears that any other structures on the site were razed and removed. In addition, subsurface remains were sparse. As a result, only offers limited data sets.

38DN113 is located approximately 300 feet south of S-17-684 in a cotton field. The site was originally identified as a linear scatter of brick rubble during pedestrian survey. Beyond brick fragments, no other surface artifactual remains were located. Four shovel test were excavated at 25 foot intervals within the linear scatter. None of these tests yielded subsurface remains. The site probably represents a series of outbuildings showing on the 1959 Fork quadrangle map.

The central UTM coordinates are E657460 N3800760 and the soils are somewhat excessively drained Pocalla sands. The plowzone was found to a depth of 0.9 feet and was dark grayish brown (10YR4/2) overlying pale brown (10YR6/3) subsoil. Based on the surface scatter of brick, the site measures approximately 200 feet north-south by 100 feet east-west.

38DN113 is recommended as not eligible for inclusion on the National Register of Historic Places. The site has been badly damaged by plowing and yielded no subsurface artifactual remains. As a result, it is unlikely that the site can address significant research questions.

38DN114 is located just south of S-17-684 in a plowed field. The site was originally identified during pedestrian survey as a scatter of early to mid twentieth century materials. Surface visibility was good and a collection was made. In addition, the site was shovel tested at 25 foot intervals in a

cruciform pattern. Of the nine tests excavated, six yielded subsurface remains. The artifacts collected are summarized in Table 5.

Table 5.
Artifacts recovered from 38DN114

Artifacts	Surface	25'N	50'S	100'S	150'S	50'W	25'W
Undec. whiteware	27						
Blue dec. ironstone	1						
White porcelain	2						
Alka. glz. stonewares	3		2				
Clear bottle glass	11	5	7	1		4	
Amethyt bottle glass	2						
Aqua bottle glass	5						1
Brown bottle glass			2				
Milk glass	1						
Jar sealer fragments	2						
Wire nails			1			2	1
Grommets							1
UID iron fragments	1						1

These artifacts strongly suggest a twentieth century occupation. Although whitewares have a mean ceramic date of 1895 (Bartovics 1981), they are still being manufactured today. In addition, the presence of wire nails and canning jar sealers suggest twentieth century occupation. Kitchen related artifacts represent 91.6% whereas architectural items represent 4.8% of the collection.

Based on shovel testing and surface remains, the site measures approximately 200 feet north-south and 150 feet east-west. The central UTM coordinates are E657760 N3800690 and the soils are somewhat excessively drained Pocalla sands. The plowzone was found to a depth of 1.0 feet and was dark grayish brown (10YR4/2) overlying pale brown (10YR6/3) subsoil.

38DN114 is recommended as not eligible for inclusion on the National Register of Historic Places. The site has been badly damaged by plowing and shovel testing yielded no evidence for subsurface features or discrete activity areas. As a result, it is unlikely that the site can address significant research questions, since the site contains limit data sets and integrity.

38DN115 is located approximately 500 feet north of S-17-684 in a logged, cleared area. The site was initially identified during pedestrian survey as a Middle Woodland surface scatter. Visibility was good and a collection was made. In addition, seven shovel tests were excavated at 25 foot intervals in a cruciform pattern from the site's posited center. Of these seven tests, only one yielded subsurface remains. Artifacts include two Yadkin cord marked sherds collected from the surface, two rhyolite lithic debitage, and one small sherd collected from the positive shovel test.

Based on surface remains and shovel testing, the site measures approximately 50 feet by 50 feet. The central UTM coordinates are E657220 N3800880 and the soils are excessively drained Lakeland sand. The disturbed upper 0.8 feet consisted of dark brown (10YR4/3) sand overlying reddish yellow (5YR6/6) sand (or what was referred to in the field as "pumpkin colored" soil) overlying brownish yellow (10YR6/6) subsoil.

Based on the sparsity of the remains limited only to prehistoric sherds, it is unlikely that the site can address important research questions about the middle Woodland in Dillon County. 38DN115

is recommended as not eligible for inclusion on the National Register of Historic Places.

38DN116 is located approximately 1500 feet north of S-17-684, adjacent to Bell Swamp Branch in the north central portion of the study area. The site was originally brought to our attention by Mr. Earl Gleason, a local collector. The site represents a relatively large Middle Woodland occupation with deeply deposited remains. Surface visibility at the site was good as it has been logged and remains relatively clear. As a result, an extensive collection was made, although there was no attempt to perform a controlled collection since the surface of the site has been damaged and the artifacts displaced. Also, the site has been surface collected over the years which compromised the ability of surface remains to yield information about activity areas.

Surface collected from the site were 14 Yadkin cord marked sherds, eight Yadkin check stamped sherds, five Yadkin plain sherds, three Yadkin fabric impressed sherds, one Yadkin simple stamped sherd, four Badin plain sherds, one Badin check stamped sherd, one Badin cord marked sherd, one Badin fabric impressed sherd, eight Hanover fabric impressed sherds, two Hanover cordmarked sherds, one Hanover check stamped sherd, 29 small sherds, 11 porphyritic rhyolite debitage, four argyllite debitage, three quartz debitage, one felsic tuff debitage, one used felsic tuff flake, one used plain rhyolite flake, one porphyritic rhyolite biface midsection and seven chipped stone projectile points or point fragments. These projectile points are summarized in Table 6.

Table 6.
Projectile Points from 38DN116
(measurements in millimeters)

CSPP	Material	Length	Blade length	blade width	haft width	thickness
Morrow Mountain I	Porphy. Rhyolite	?	?	38.6	21.7	9.1
Morrow Mountain I	Argyllite	41.7	37.5	31.4	13.2	8.6
Morrow Mountain I	Felsic Tuff	?	?	29.4	11.2	12.7
Guilford	Felsic Tuff	76.0	66.4	23.8	16.6	15.5
Savannah River Stemmed	Argyllite	?	?	30.3	14.2	9.2
Thelma	Banded Rhyolite	38.1?	33.3?	21.4	10.2	6.7
Caraway	Porphy. Rhyolite	24.2	--	18.2	--	5.2

The Morrow Mountain felsic tuff projectile point apparently snapped at the tip and was reworked and used as some type of bifacial tool.

The site was extensively shovel tested using a grid pattern with tests and transects at 25 foot intervals (Figure 11). A total of 85 tests were excavated with 36 (or 42.3%) yielding subsurface remains. These shovel tests indicated that the site extended to a maximum depth of 2.2 feet below ground surface. Table 7 summarizes the artifacts recovered from shovel testing.

Artifact density maps were created to show both the lithic and ceramic densities across the site (Figures 12 and 13). In both instances artifacts were concentrated in the east central portion of the site, although a minor concentration of ceramics was also found about 50 feet west of the primary concentration.

The average soil profile in the site area consisted of about 0.9 feet of disturbed Ap horizon. This soil consisted of dark brown (10YR4/3) sand overlying reddish yellow (5YR6/6) sand (or what was referred to in the field as "pumpkin colored" soil) to a maximum depth of 2.2 feet overlying brownish yellow (10YR6/6) subsoil. In peripheral areas of the site, the "pumpkin colored" soil was absent.

Table 7.
Artifacts recovered from shovel testing at 38DN116

Shovel Test	Sherds				Used Flakes			
	Badin	Yadkin	Hanover	Small	Flakes		Cobbles	Total
T1ST6				1				1
T2ST3				1				1
T2ST4				1				1
T2ST5				1				1
T2ST6				1	1			2
T2ST7				2				2
T2ST8				4	5			9
T2ST9		6		4	11			21
T2ST10	1			3		1	5	
T2ST11	1						1	
T3ST3		2						2
T3ST4		1		5				6
T3ST6				1	6		1	8
T3ST7				1				1
T3ST9	1							1
T3ST10			1				1	
T3ST11			1				1	
T3ST12			4				4	
T4ST4				2				2
T4ST5				3				3
T4ST6				1				1
T4ST8				1	1			2
T4ST9					2			2
T4ST10			1				1	
T4ST12	1			2			3	
T5ST3					3			3
T5ST5					3			3
T5ST6	1							1
T5ST7					1			1
T5ST9			1					1
T5ST11				1			1	
T5ST12		1		1		1	3	
T5ST14				1			1	
T5ST15 2			2	2			6	
T6ST4					1			1
T6ST8				4				4

Based on shovel testing and surface survey, the site measures approximately 400 feet northwest-southeast by 200 feet northeast-southwest. The central UTM coordinates are E657160 N3801200 and the soils are somewhat poorly drained Lynchburg sandy loam.

The site is recommended as eligible for inclusion on the National Register of Historic Places based on criterion D: that a site may "have yielded, or may be likely to yield, information important in prehistory or history." This site is significant at the state level, since the information the site can contribute is meaningful primarily in better understanding Yadkin sites in South Carolina. Much of what is known about the Yadkin phase is from research in North Carolina.

38DN116 represents a well preserved Middle Woodland site containing a number of data sets with the ability to address significant research questions. These questions include:

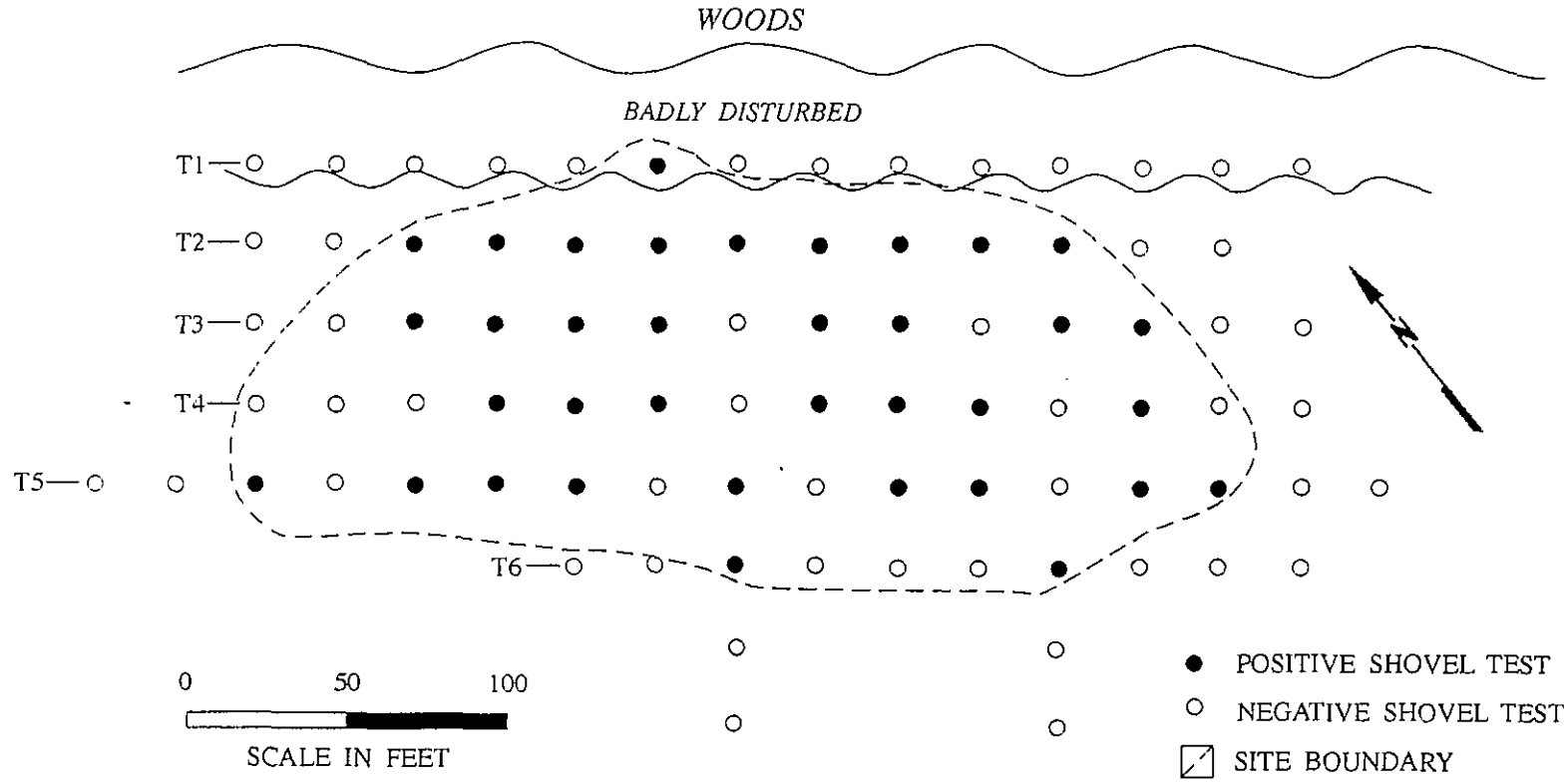
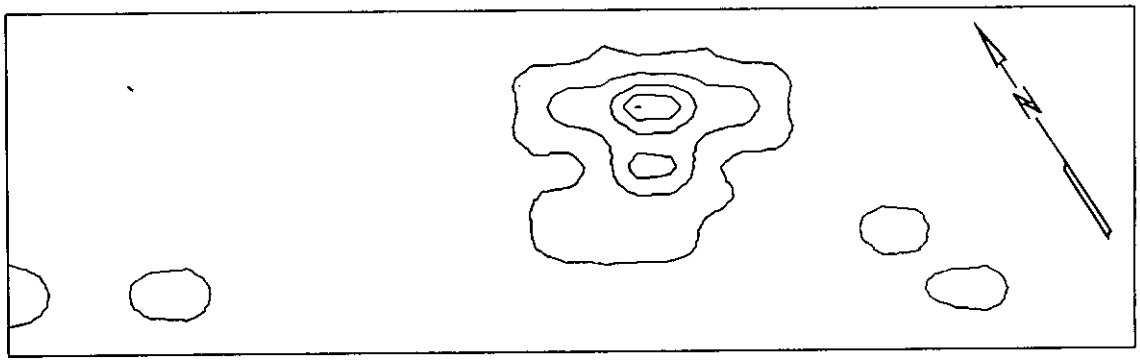
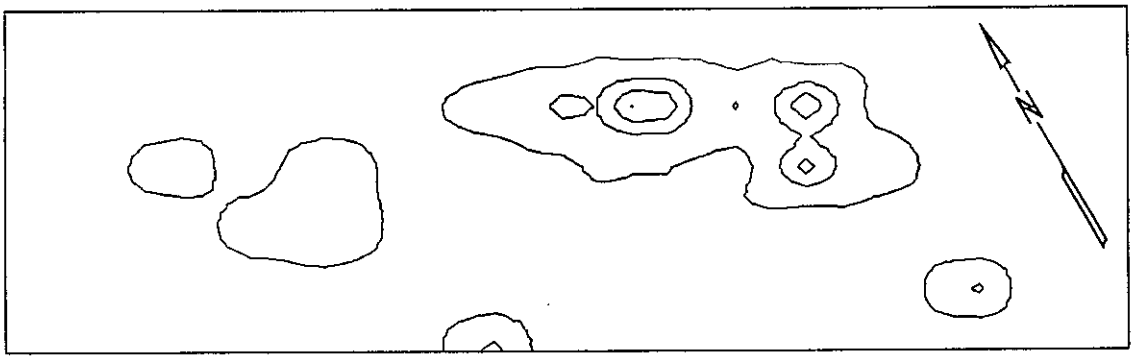


Figure 11. Location of shovel tests at 38DN116.



Contour Interval = 2

Figure 12. Lithic density at 38DN116.



Contour Interval = 2

Figure 13. Ceramic density at 38DN116.

- Is there a changing preference for lithic raw materials at 38DN116? If so, does this change indicate different seasonal rounds? Data sets needed to answer this research question are lithic raw material and diagnostic tools. Both are present at 38DN116.

- What types of activities took place at the site? What do these activities say about possible changing site function and land use from the Badin to Hanover phases? Data sets needed to answer this research question include lithics, ceramics, and features. While lithics and ceramics exist at the site, no clear features were encountered during shovel testing. However, the deeply deposited intact remains suggest a high potential for subsurface features. In addition, density maps as well as the large size of sherds encountered in some of the shovel tests suggest the presence of features which may be leached out, yet nevertheless present.

- What do the ceramics contribute to understanding social organization? Researchers have argued that cordage imprints on pottery may be distinct by ethnic, social, or kin groups, perhaps suggesting that the diversity observed in the archaeological record may reflect social organization. The data set needed to address this question is pottery which is present at 38DN116.

While a number of other research questions could be addressed, those listed above can yield important information about the middle Woodland in the Pee Dee River drainage in South Carolina; an area for which little is known. The only other Yadkin phase sites which have been excavated are 38SU83 (Blanton et al. 1986) and 38FL249 (Trinkley et al. 1994). Of those two, only 38FL249 is in the Pee Dee river system.

38DN117 is located approximately 1200 feet north of S-17-684 in a heavily logged area just east of Cypress Ponds. This site was identified during pedestrian survey as a small scatter of prehistoric ceramics on the ground surface. Visibility was good and a collection was made. This collection included four small unidentifiable sherds. Four shovel tests were excavated within the scatter. None yielded subsurface remains. The surface scatter measured approximately 25 feet by 25 feet. It is likely that this small site is related to the use of the area by those occupying 38DN116.

Soil profiles indicated a disturbed upper layer about 0.9 feet of dark brown (10YR4/3) sand overlying brownish yellow (10YR6/6) subsoil. The central UTM coordinates are E657020 N3801140 and the soils are excessively drained Lakeland sand.

This site is recommended as not eligible for inclusion on the National Register of Historic Places. The site is small (four sherds) and has been badly disturbed by logging activities. As a result, it is unlikely that this site can address significant research questions.

38DN118 is located approximately 900 feet north of S-17-684 in a heavily logged area just east of Cypress Ponds. This site was identified during pedestrian survey as a small scatter of early to mid twentieth century remains on the ground surface. Visibility was good and a collection was made. This collection consisted of one undecorated whiteware, five fragments of amethyst glass, two alkaline glazed stonewares, and two small prehistoric sherds. Four shovel tests were excavated within the scatter. None yielded subsurface remains. The surface scatter measures approximately 50 feet by 50 feet.

Soil profiles indicated a disturbed upper layer about 1.0 feet of dark brown (10YR4/3) sand overlying brownish yellow (10YR6/6) subsoil. The central UTM coordinates are E656950 N3801000 and the soils are excessively drained Lakeland sand.

This site is recommended as not eligible for inclusion on the National Register of Historic Places. The site is small and has been badly disturbed by logging activities. Both the historic and prehistoric components offer very limit data sets. As a result, it is unlikely that this site can address significant research questions.

38DN119 is located approximately 400 feet north of S-17-684 in a plowed field, just south of a house which is outside the study area. This site was identified during regular shovel testing. Surface visibility was poor and no collection was attempted. The site was shovel tested at 25 foot intervals in a cruciform pattern. A total of 14 tests were excavated with six yielding subsurface remains. These remains are summarized in Table 8.

Table 8.
Artifacts recovered from 38DN119

Artifact	Center	25'S	50'S	25'W	50'W	75'W
Whiteware	1		1			1
Clear glass	3			1		3
Amethyst glass				1		
Aqua glass		1				
Brown glass				1		
UID nails				2		
UID iron	1					

Artifacts such as whiteware and amethyst glass suggest an early to mid twentieth century occupation. None of the shovel tests encountered evidence for subsurface features.

Soil profiles indicated a plowzone layer of about 1.0 feet of dark brown (10YR4/3) sand overlying brownish yellow (10YR6/6) subsoil. The central UTM coordinates are E655640 N3801200 and the soils are excessively drained Lakeland sand.

This site contains data sets (e.g. kitchen and architectural items) which are too limited to address significant research questions relating to tenant period lifeways. As a result, this site is recommended as not eligible for inclusion on the National Register of Historic Places.

38DN120 is located at the end of a dirt road shown on the 1959 Fork quadrangle map. This road no longer exists and the site is now in planted pine. The site is approximately 2200 feet north of S-17-684 and 3000 feet east of S-17-45. The site was identified during shovel testing as a scatter of early to mid twentieth century domestic remains. Surface visibility was good and a collection was made. In addition, the site was examined with shovel tests at 25 foot intervals in a cruciform pattern. Of the 16 shovel tests excavated, nine yielded subsurface remains. The artifacts collected are listed in Table 9.

Kitchen related items represent 56.4% (n=35) of the collection and architectural items represent 27.7% (n=18) of the collection. This is similar to the Piedmont Tenant/Yeoman Artifact Pattern proposed by Drucker et al. 1984:5-47, although the architecture category falls slightly below the lower end of the range. This may be a result of surface collecting in conjunction with shovel testing. Nonetheless, the artifact profile suggests more substantial housing than might be found a tenant sites with a similar amount of testing (see, for example, Trinkley and Adams 1992). Therefore, it is possible that the site may have been occupied by a white yeoman farmer.

Soil profiles indicated a plowzone layer of about 1.1 feet of dark brown (10YR4/3) sand overlying brownish yellow (10YR6/6) subsoil. The central UTM coordinates are E655970 N3801620

Table 9.
Artifacts recovered from 38DN120

Artifacts	Surface	Center	50'S	100'S	25'E	50'E	125'E	25'W	50'W	75'W
Undec. whiteware	2					1				1
Alka. glz. stoneware	1	1							1	
Clear bottle glass	8	6		1	1			1	1	1
Amethyst bottle glass	4		1							
Aqua bottle glass	1			1						
Brown bottle glass	1									
Blue bottle glass								1		
Window glass	4				6					
Wire Nails	3	3			1					1
Wood screw		1								
Light fixture fragment	1									
Shell casing						1				
Marble	1									
Copper tube fragment	1									
Melted lead		1								
Battery core							1			
UID iron								1		1

and the soils are excessively drained Lakeland sand.

38DN120 has been badly disturbed by cultivation, and no architectural features or subsurface feature were encountered during shovel testing and surface examination. Also, the data sets present are limited and it is unlikely that the site can yield significant information about early twentieth century lifeways. As a result, this site is recommended as not eligible for inclusion on the National Register of Historic Places.

38DN121 is located approximately 2500 feet north of S-17-684 and 1900 feet east of S-17-45. There are three loci associated with the site including; 1) a domestic scatter, 2) a trash dump, and 3) a tobacco barn (Figure 14). Both the tobacco barn and the trash dump are contained within a large clump of trees within an expanse of planted pine. The domestic scatter is located just northwest of the clump of trees and is in planted pine.

Based on surface remains and shovel testing the site measures approximately 400 feet north-south by 300 feet east-west. The central UTM coordinates are E655800 N3801780 and the soils are excessively drained Lakeland sand. Soil profiles indicated 0.8 feet of dark brown (10YR4/3) sand overlying brownish yellow (10YR6/6) subsoil.

The domestic scatter (locus 1) was examined using 23 shovel tests at 25 foot intervals in a cruciform pattern. Of those 23 tests, 14 (or 60.9%) were positive. In addition, surface visibility was good and a collection was made. These artifacts are summarized in Table 10.

The majority of ceramics at 38DN121 are undecorated whitewares (n=8) with a mean date of1895 (Bartovics 1981). There was also one each of blue transfer printed whiteware (MCD=1848; Bartovics 1981), blue handpainted whiteware (MCD=1848; Bartovics 1981), and edged whiteware (MCD=1853; Bartovics 1981). These yield a mean ceramic date of 1882.6. Based on the 1959 Fork quadrangle map, the house was no longer occupied at that time. Of the artifacts collected at locus 1, 30 (or 57.7%) are kitchen related and 16 (or 30.7%) are architectural related. This is a similar

Table 10.
Artifacts collected from locus 1 of 38DN121

Provenience	WW	TPWW	HPWW	EWW	CLG	AMG	AQG	BRG	LGG	NAILS	UIDI
Surface	3	1			1		1			1	
25'S	1										
50'S					1						
25'N					1						
50'N				1	2					3	1
75'N					1			1		2	
100'N					5		1			7	
125'N	2										
25'E			1		1						
50'E									1		
75'E										1	
25'W	1										1
50'W					1						3
75'W	1				1	1					
100'W										2	1
Total	8	1	1	1	14	1	2	1	1	16	6

Key: WW=whiteware; TPWW=transfer printed whiteware; HPWW=hand painted whiteware; EWW=edged whiteware; CLG=clear glass; AMG=amethyst glass; AQG=aqua glass; BRG=brown glass; LGG=light green glass; UIDI=UID iron fragments.

profile to 38DN120 with a posited white yeoman farmer occupation.

No artifacts were collected from the trash dump (locus 2), but the dump contained primarily enameled tinwares, tin cans, bottles, and jars. Marks on a number of the glass vessels were recorded in the field. Table 11 summarizes the glassware marks observed.

Table 11.
Glassware marks from Locus 2, 38DN121.

Mark	Date Range	Mean Date	Adj. MD
WATKINS (Fike 1987)	1868-present	1930	1913.5
Owens Illinois Glass Co. (Toulouse 1971)	1929-1954	1941.5	1941.5
Duraglas (Toulouse 1971)	1940-present	1965.5	1949.5
Knox Glass Co. (Toulouse 1971)	1954-1968	1961	1956.5
Knox Mason (Toulouse 1977)	1924-1951	1937.5	1937.5
Hazel-Atlas Glass Co. (Toulouse 1971)	1910-1030	1920	1920
Lamb Mason (Toulouse 1977)	1940-1950	1945	1945
Florida Glass Manuf. Co. (Toulouse 1971)	1926-1947	1936.5	1936.5

Mean Date = 15537 ÷ 8 = 1942.1
Mean Date adjusted for a 1959 ending occupation date = 15500 ÷ 8 = 1937.5

Based on surface remains, locus 2 measures approximately 50 feet north-south by 25 feet east-west.

The tobacco barn (locus 3) is a 25 feet by 25 feet cement mortared log building resting on a continuous textured brick sill (Figure 15). There are two wooden shuttered windows in the loft area and there are holes just above the sill for a wooden floor. There is also a partially collapsed brick flue

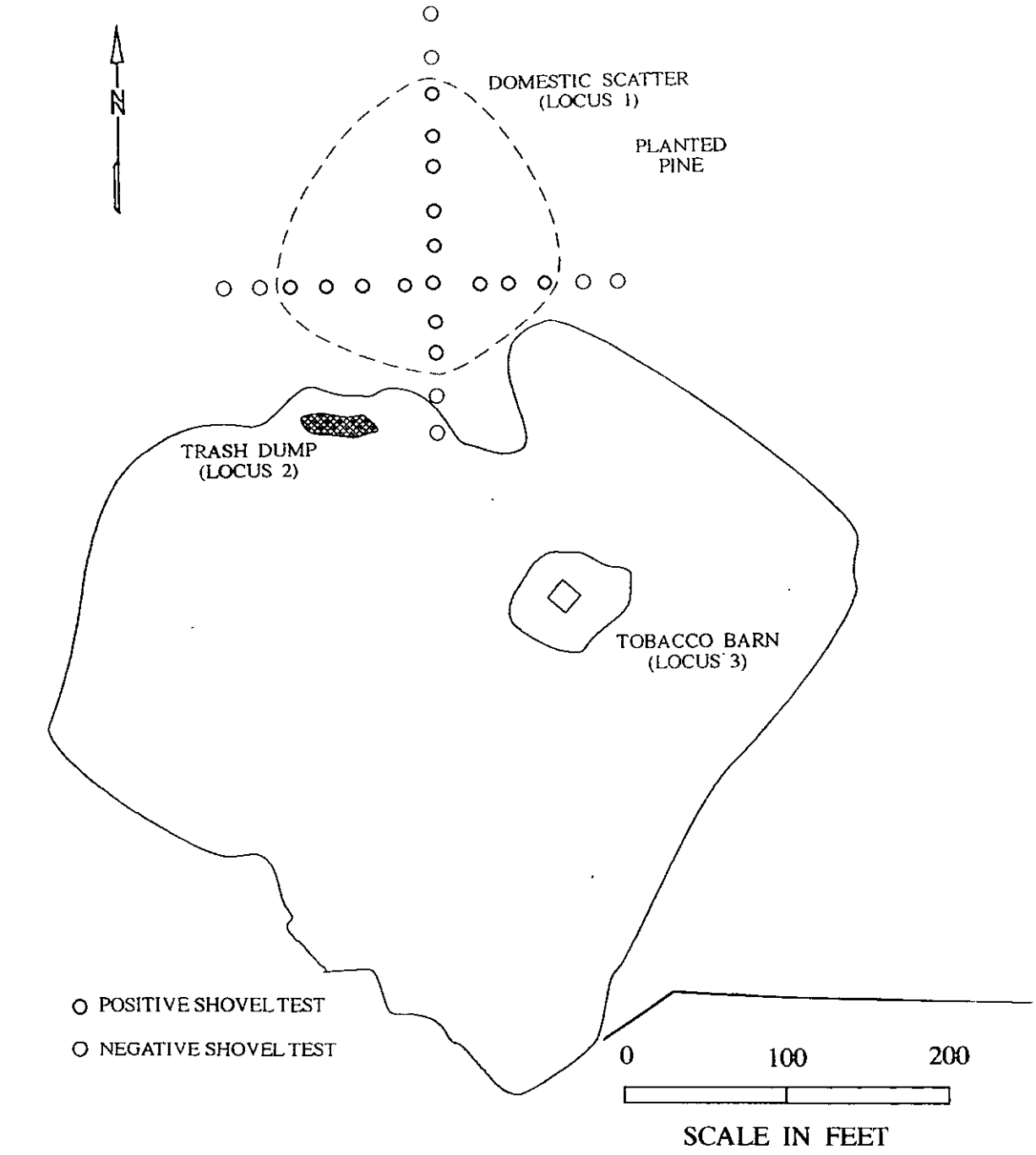


Figure 14. Locations of shovel tests and loci at 38DN121.

Figure 15. Tobacco barn at 38DN121.

Figure 16. View of brick flue at 38DN121 tobacco barn.

on the south elevation. The skirt-type shed overhang has collapsed on all but one side. The roofing material is tin. The barn was oriented N50°E.

Four shovel tests were excavated around the barn with none yielding subsurface remains. However, there were a number of tin cans and several jars in the surrounding area. No evidence was found that the barn had used the gas burners that replaced the wood-stoked flues in the 1950s, although one burner about the size of a coffee can was found. It is possible that small amounts of tobacco were cured in this fashion.

38DN121 can address a number of significant research questions with the data sets provided.

- How was an early 20th century farmstead spatially organized? Based on arguments made about the organization of twentieth century African-American domestic sites (see Westmacott 1992) can ethnicity be determined at archaeological sites using spatial organization as an indicator? Data sets needed to address this question is evidence of activity areas, trash dumps and outbuilding locations. These are present at 38DN121. This work can be compared with similar work in nearby Florence County at 38FL240 (Trinkley et al. 1994).

- It has been argued that portions of South Carolina's Coastal Plain (particularly Chesterfield, Marlboro, and Dillon Counties) developed more similarly to North Carolina since they were not large slave holding counties. Of course, this had long term effects on the demography of the county since even in the 1850s whites continued to outnumber blacks. In addition, Dillon County was economically depressed meaning that many whites were not much better off than their black counterparts. Since the artifact pattern is similar to that found at poor white occupied sites, 38DN121 appears to represent a white yeoman farmer occupation (see, for example, Drucker et al. 1984; Joseph et al. 1991; and Trinkley 1993). What does the artifact assemblage reflect about the accessibility of goods to poor whites as opposed to poor blacks? The data set needed to address this question is a large sample of artifacts which adequately represents the range of items possessed by the occupant. The results of this work could then be compared to work at black occupied tenant sites such as 38FL240 (Trinkley et al. 1994).

- Why and in what ways is the subsistence strategy at 38DN121 similar or different to other contemporaneous sites? Previous research at the Ashley Plantation at the Savannah River site (Brooks 1987) indicated that tenants relied on game more than on domestic meats. Also there was a heavy reliance on processed foods. This was based on the large amount of tin can fragments and the relatively few canning jar fragments. 38DN121 can be compared to Ashley Plantation and other sites of the same time period such as 38FL240 (Trinkley et al. 1994), 38GR190 (Trinkley 1993), and 38CH127 (Trinkley 1994). Information relating to twentieth century lifestyles is missing for this part of the state, and through comparisons with sites from the same time period patterns or variability in diet may begin to be recognized and explained. The presence of food containers at this site indicate that this question can be addressed.

As a result of the site's ability to address significant research question 38DN121 is recommended as eligible for inclusion on the National Register of Historic Places.

38DN122 is located approximately 2500 feet north of S-17-684 and 3800 feet east of S-17-45. The site was initially identified as a surface scatter of early to mid twentieth century remains. During surface collection, a small prehistoric component was found to also occupy the site area. In addition to surface collection 27 shovel tests were excavated at 25 foot intervals across the site. Of those 27 tests, 11 (or 40.7%) yielded subsurface remains. These artifacts are summarized in Tables 12 and 13.

Table 12.
Prehistoric Artifacts recovered from 38DN122

	Sherds			
Provience	Yadkin	Hanover	Small	Debitage
Surface	2	5	13	
25'S			1	
50'N				7
75'N			1	
125'N	1			
75'W			1	
125'W			1	
25'E		2	3	

Datable historic ceramics are primarily undecorated whitewares (n=11) which has a mean ceramic date 0f 1895 (Bartovics 1981). One example of transfer printed whiteware was also collected (MCD=1848; Bartovics 1981). Of the 33 historic artifacts collected, 28 (or 84.8%) are kitchen related and 4 (or 12.1%) are architectural related. This is artifact pattern is similar to that found at other tenant sites investigated at a survey level (see, for example, Trinkley and Adams 1992).

The prehistoric component is contemporaneous with 38DN116 and may relate to the use of that site.

Table 13.
Historic Artifacts recovered from 38DN122

Provenience	WW	TPWW	AGSW	SGSW	CLG	AMG	WIN	NAILS	UIDI
Surface	7	1	2			1	1		
25'W	1				3			2	1
50'W	3		3	1	1	2		1	
75'W					1				
100'W					1	1			

Key: WW=undecorated whiteware; TPWW=transfer printed whiteware; AGSW=alkaline glazed stoneware;SGSW=salt glazed stoneware; CLG=clear glass; AMG=amethyst glass; WIN= window glass; UIDI=unidentifiable iron.

The central UTM coordinates are E656220 N3801600 and the soils are excessively drained Lakeland sand. Soil profiles indicated 1.0 feet of dark brown (10YR4/3) disturbed sand overlying about 1.2 feet of reddish yellow (5YR6/6) sand which ended on brownish yellow (10YR6/6) subsoil. Only prehistoric artifacts were found at a depth below 1.0 foot. Based on shovel testing and the distribution of surface remains, 38DN122 measures approximately 100 feet north-south by 150 feet east-west.

38DN122 is recommended as not eligible for inclusion on the National Register of Historic Places. The historic component has been badly disturbed by cultivation and yielded only limited data sets. The prehistoric component is relatively small and no evidence was encountered for possible features. As a result, neither component can contribute substantial information to address significant research questions.

38DN123 is located approximately 1800 feet north of S-17-684 and 3100 feet east of the intersection of S-17-684 and S-17-45. The site is located on the edge of a planted pine field which offered excellent surface visibility. As a result, a collection was made. In addition, the site was shovel tested at 25 foot intervals in a cruciform pattern. Of the 10 shovel tests excavated, only one produced subsurface remains. This tested yielded one undecorated whiteware. Surface collected from the site were 12 undecorated whitewares, one cream colored whiteware, five alkaline glazed stonewares, one banded yellow ware, nine fragments of clear glass, one fragment of aqua glass, and four fragments of amethyst glass. Whitewares have a mean ceramic date of 1895 (Bartovics) and the only other datable ceramic, yellow ware, has a mean ceramic date of (1890; Leibowitz 1985) yielding an 1894.6 mean ceramic date for the site.

The central UTM coordinates are E655940 N3801540 and the soils are excessively drained Lakeland sand. Soil profiles indicated 1.0 feet of dark brown (10YR4/3) disturbed sand overlying brownish yellow (10YR6/6) subsoil. Based on the surface scatter the site measures approximately 100 by 100 feet.

Based on the sparsity of subsurface remains and the limited data sets the site provides, the site cannot contribute significant information about early to mid-twentieth century lifeways in Dillon County. As a result, 38DN123 is recommended as not eligible for inclusion on the National Register of Historic Places.

38DN124 is located approximately 1100 feet north of S-17-684 and 3000 feet east of the intersection of S-17-684 and S-17-45. Surface visibility was excellent and a collection was made. In addition the site was investigated with shovel tests at 25 foot intervals in a cruciform pattern. None of the seven tests excavated yielded subsurface remains. The surface remains included nine undecorated whitewares (MCD=1895; Bartovics 1981), one transfer printed whiteware (MCD=1848; Bartovics 1981), one white porcelain (MCD=1883; Bartovics 1981), and one fragment of clear glass. The mean ceramic date for the site is 1889.6.

The central UTM coordinates are E655920 N3801260 and the soils are excessively drained Lakeland sand. Soil profiles indicated 1.0 feet of dark brown (10YR4/3) disturbed sand overlying brownish yellow (10YR6/6) subsoil. Based on the surface scatter the site measures approximately 100 by 100 feet.

Only 11 artifacts were surface collected from the site and there were no subsurface remains encountered in shovel testing. As a result, the data sets are very limited indicating that the site cannot yield information important to Dillon County history. 38DN124 is recommended as note eligible for inclusion on the National Register of Historic Places.

38DN125 is located approximately 200 feet west of S-17-22, just south of Bell Swamp branch. The site was first recognized as a pile of textured and untextured bricks with a number of nearby surface artifacts (primarily barrel bands and tin cans). This site is located in an area thought to contain remnants of an old mill shown on Mills' Atlas. However, shovel testing and a thorough pedestrian survey of the surrounding landscape suggests that the bricks and other debris may have been dumped here as garbage. Of the 12 shovel tests excavated, only three yielded subsurface remains. These remains are summarized in Table 14.

The central UTM coordinates are E658420 N3800580 and the soils are excessively drained Lakeland sand. Soil profiles indicated 0.7 feet of dark brown (10YR4/3) sand overlying brownish yellow subsoil. Based on the shovel testing, the site measures 100 feet east-west by 25 feet north-south.

Table 14.
Artifacts recovered from 38DN125

Artifacts	25'E	75'E	25'W
Clear glass			1
UID iron	4		
Lithic debitage		1	11

38DN125 is recommended as not eligible for inclusion on the National Register of Historic Places. The historic component of the site appears to represent a trash dump and the prehistoric component consists of a small lithic scatter. It is unlikely that either component can yield important information to address significant research questions.

CONCLUSIONS

The primary goals of this study were, first, to identify the archaeological resources of the City of Dillon wastewater elluent land application tract and, second, to asses the ability of these sites to contribute significant archaeological, historical, or anthropological data. The second aspect essentially involves the site's eligibility for inclusion in the National Register of Historic Places, although Chicora Foundation only provides an opinion of National Register eligibility. These goals were achieved with 21 sites being identified and two (38DN116 and 38DN121) being recommended as eligible for inclusion in the National Register of Historic Places (Table 15).

Secondary goals were, first, to examine the relationship between site location, soil type, and topography. Previous work (Taylor 1984) indicates that prehistoric sites in the Pee Dee River area are located within 1000 feet from the swamp edge and are at least 400 feet across. In general, however, prehistoric sites are located on well drained soils close to a water source. Another secondary goal was to observe changes in historic settlement pattern. South and Hartley (1980) have noted that eighteenth century settlements are located on high ground adjacent to deep water access. While there is a bluff in the northern portion of the tract there is no deep water access. Taylor (1984:196) found that in the nineteenth century the river bluff was abandoned as farmstead, but there was minor occupation by tenant farmers. The settlement pattern became more road oriented, being located next to primary or secondary roads.

Table 15.
Sites identified in the Dillon County Wastewater Treatment tract

Site	Type	Size (feet)	Eligibility Recommendation
38DN105	tenant	100 x 100	Not eligible
38DN106	tenant	100 x 150	Not eligible
38DN107	tenant	200 x 200	Not eligible
38DN108	tenant	75 x 100	Not eligible
38DN109	19th/20th century	250 x 300	Not eligible
38DN110	tenant	75 x 100	Not eligible
38DN111	prehistoric	100 x 200	Not eligible
38DN112	20th century	300 x 400	Not eligible
38DN113	20th century	100 x 200	Not eligible
38DN114	tenant	150 x 200	Not eligible
38DN115	prehistoric	50 x 50	Not eligible
38DN116	prehistoric	200 x 400	Eligible
38DN117	prehistoric	25 x 25	Not eligible
38DN118	tenant/prehist.	50 x 50	Not eligible
38DN119	tenant	75 x 75	Not eligible
38DN120	tenant	100 x 225	Not eligible
38DN121	tenant	300 x 400	Eligible
38DN122	tenant/prehist.	100 x 100	Not eligible
38DN123	tenant	100 x 100	Not eligible
38DN124	tenant	100 x 100	Not eligible
38DN125	20th cent./prehist.	50 x 50	Not eligible

Prehistoric Sites

Of the 21 site identified, seven contained prehistoric components (see Table 15). Of those seven sites, one (38DN116) is recommended as eligible for inclusion on the National Register. Curiously, despite intensive shovel testing along the bluff adjacent to the Little Pee Dee River, no prehistoric sites were found. However, one shovel test yielded one small unidentifiable sherd. Additional testing around this find yielded no further subsurface remains.

All of the prehistoric sites are located closer to Bell Swamp branch, with five of the seven within 1000 feet of the swamp edge. Based on the topography, Taylor (1984:195) found that although prehistoric sites were found in four different settings, the most intensively used areas were the bluff edges and minor tributaries. However, at the Pee Dee Electrical Generating Facility the river or creeks were located within 500 feet of the sites. During the Gibson Plantation tract survey (Trinkley and Adams 1992) it was discovered that the proximity to water was of paramount importance. The largest site identified (38FL249) was immediately adjacent to a springhead. At the Dillon County wastewater treatment tract, Bell Swamp was probably a more desirable swamp to live next to since the land gently sloped and allowed easier access to the swamp environment. Also, the Native Americans could take advantage of the plants and animals thriving in and around the two Carolina bays. In addition, actual flowing water is closer to high ground (200 feet) as opposed to the Little Pee Dee River side (over 3000 feet). Overall, the prehistoric sites were located in very desirable areas.

Interestingly, the largest site (38DN116) is located in poorly drained Lynchburg soils and we found that a small portion of the site adjacent to the swamp actually stood in water after only brief rains. It is possible that during the prehistoric period, drainage in this area was better. However, a number of important variables (e.g. accessibility to flowing water, the Carolina bays, and the swamp environment) were probably responsible for the location of this site.

Historic Sites

Of the 21 sites identified 17 contained historic components. Of these 17 historic sites one (38DN121) was recommended as eligible for inclusion on the National Register of Historic Places.

The earliest site encountered during the survey was one that was probably occupied around 1800. This site, known as Carmichael's on the 1826 Mills' Atlas (Figure 8), is located on S-17-22 which appears on the 1826 map and follows approximately the same alignment as the present road. This site is located approximately 800 feet south of Bell Swamp branch. Across S-17-22 adjacent to the creek, Mills' Atlas also shows a mill, probably owned by Carmichael. Despite intensive surface and pedestrian survey no evidence of this mill was located. A local avocational archaeologist mentioned that over the years local residence had robbed the old mill site of its timbers (Mr. Earl Gleason, personal communication).

In areas where there is no deep water access or where rivers and creeks are not navigable, roads were the vein of transportation and were the focus of settlements, particularly when they crossed a creek where a mill could operate.

The remaining historic sites appear to date to the tenant period. One of these (38DN121) is recommended as eligible for inclusion on the National Register of Historic Places. Of these tenant period sites all but one are located on well to excessively drained soils. The remaining site is located on somewhat poorly drained soils. The majority of these sites are located in two small "neighborhoods". One is found in the far eastern portion of the tract and includes 38DN106, 38DN107, 38DN108, and 38DN110. Based on the configuration of the sites, it appears that there was a network of dirt farm roads in the area. The other "neighborhood" is located in the far northwestern portion of

the tract and includes 38DN120, 38DN121, 38DN122, 38DN123, and 38DN124. Several of these site appear on the 1959 Fork quadrangle map. It is likely that these two site cluster represent kin based settlements. Most of the remaining sites (e.g. 38DN105, 38DN109, 38DN112, and 38DN114) are located immediately adjacent to S-17-22 or S-17-684.

Four of the tenant sites yielded enough artifacts to allow artifact patterning for at least the kitchen and architecture groups. Interestingly, 38DN109 (Carmichael's) and 38DN114 yield very different profiles than 38DN120 and 38DN121 (Table16). What caused these different profiles is unclear at this level. However, both 38DN109 and 38DN114 are road oriented settlements whereas 38DN120 and 38DN121 are part of a clustered settlement.

Table 16.
Kitchen and architecture percentages of tenant sites

Site	Settlement Type	Kitchen Group	Architecture Group
38DN109	Road Oriented	90.0%	1.4%
38DN114	Road Oriented	91.6%	4.8%
38DN120	Clustered	56.4%	27.7%
38DN121	Clustered	57.7%	30.7%

The main road oriented settlements have profiles that closely resemble the tenant pattern proposed by Trinkley and Caballero (1983), whereas the clustered settlements fall within the tenant/yeoman farmer pattern proposed by Drucker et al. (1984).

Recommendations

The archaeological sites recommended in this study as eligible for inclusion on the National Register of Historic Places may be either green spaced or subjected to data recovery. Green spacing is recognized as an appropriate, and often cost-effective, mitigation measure for archaeological site conservation. This procedure involves placing the site aside and protecting it from all future ground disturbing activities in perpetuity. This is usually accomplished by placing a protective covenant on the property or by establishing preservation easements, held by some other organization. Nine recommendations are offered (subject to the review and approval of the State Historic Preservation Office) if green spacing is to be considered:

1. The site is to be physically blocked out in the field with a buffer sufficient to ensure the protection of the archaeological remains;

2. The site should be cleared, by hand, of understory vegetation. No heavy equipment should be used and all cut vegetation should be removed from the site area;

3. Any above ground remains should be cleared of vegetation by hand, taking all measures necessary to ensure that the features are not damaged;

4. The area should continue to be clearly defined during all phases of construction. No equipment should be allowed in the site area, or be allowed to the area as a turn-around. The area should not be used to stockpile supplies, or to be otherwise disturbed. All personnel, including contractor's and various subcontractor's personnel, should be strictly prohibited from entering the area. This is particularly important to prevent looting of the site;

5. Any landscaping in the site area should be conducted by hand and ground disturbance should be limited to the upper 0.2 foot of soil. No utilities, including sprinkler lines, should be placed through the site;

6. The property owner should develop a protective easement or covenant assuring the protection of the site area set aside in green spacing and this protection should be in perpetuity;

7. Appropriate security should be provided to ensure that the site is not vandalized, looted, or otherwise damaged;

8. All above ground remains which contribute to the significance of the site should receive immediate intervention to prevent their continued deterioration. This work should be performed by individuals with experience in this field, using appropriate, non-intrusive and reversible methods.

Alternatively, any of the sites recommended as eligible for inclusion on the National Register of Historic Places can be mitigated through data recovery, or the excavation, analysis, proper curation of recovered remains, and publication of findings. The level of effort at each site would be sufficient to address the research questions previously raised.

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